MacWEEK

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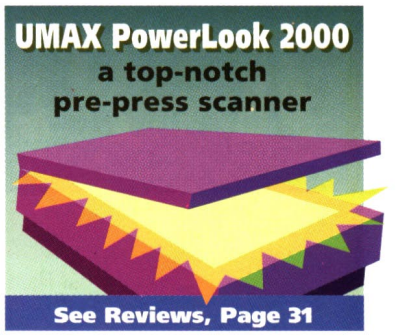
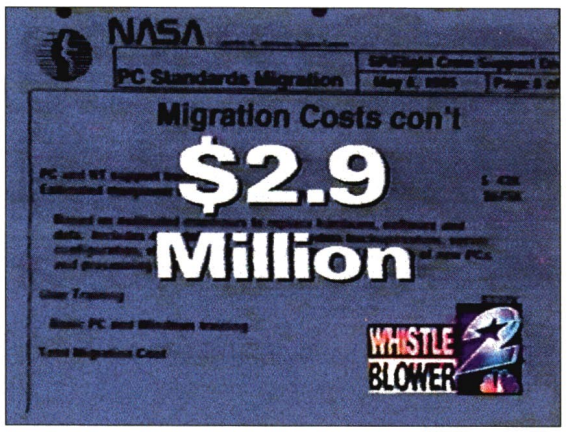




A Houston TV exposé estimated the taxpayer cost of switching NASA's Johnson Space Center to Windows. Users at the site are battling to keep their 2,800 Macs.

NASA users take PC fight to airwaves, Capitol Hill

By Henry Norr

Carrying their "Macs cost less" message through NASA's bureaucracy, into the halls of Congress and over the local airwaves, Mac users at the Johnson Space Center are determinedly resisting efforts to impose a Microsoft Windows standard on the sprawling Houston complex.

Derided as "Mac huggers" and forced to fight anonymously for fear of losing their jobs, the users have already scored a series of public-relations triumphs, and they're hoping that a report due next month from the agency's Office of the Inspector General could slow or even stop the anti-Mac crusade of John R. Garman, the space center's chief information officer.

The battle began more than a

See NASA, Page 76

Netscape taps QuickTime for Mac CoolTalk

By Joanna Pearlstein

Apple is seeking to expand its QuickTime Conferencing technology through a deal with Netscape Communications Corp. and a new product dubbed QuickTime TV.

The absence of telephony features in the Mac version of the new Netscape Navigator 3.0 had users steaming last week, but sources said the technology is on track for a September debut.

The Mac version of CoolTalk, Netscape's technology that will let users of the Navigator browser converse over the Internet, was reportedly delayed because the product is actually being developed by Apple.

Sources said Mac CoolTalk is based on Apple's QuickTime Conferencing extension, which was

See Netscape, Page 78

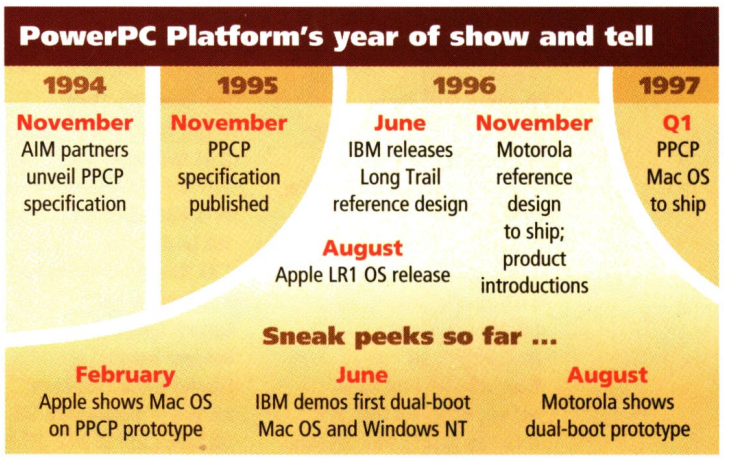
Apple ships alpha of PPCP Mac OS

By David Morgenstern

Apple last week shipped its first developer version of the Mac OS for the PowerPC Platform, Licensing Release 1.0. The company said the alpha software, based on System 7.5.3, is due to ship in the first quarter of 1997.

"We're up-to-date on ROM [revisions] and in lock step with the OS," said Steve Bernstein, Apple licensing marketing manager. He said LR1, as well as recent demonstrations of dual-booting PowerPC Platform, or

See PPCP, Page 81



QuickMail to hop on POP; Pro version keeps 3.6 feel

By Dorian Cougias

QuickMail is certainly a popular e-mail package — CE Software Inc. claims it has more than 2 million users. However, its lack of support for Internet protocols, such as TCP/IP and Post Office Protocol 3, has kept it an island.

But no longer. QuickMail Pro 1.0, due this fall, will connect through a Post Office Protocol 3, or POP 3, server. This release will mark the first time QuickMail is marketed to individuals whose mail servers are outside their organizations. Since it works with the POP servers already in use by many Internet service providers, the need for an in-house server is gone. And because it uses Internet standards, its support of TCP/IP is integral to the product.

While the company hasn't an-

See QuickMail, Page 78

Adobe Persuasion 4.0 to make move to Web

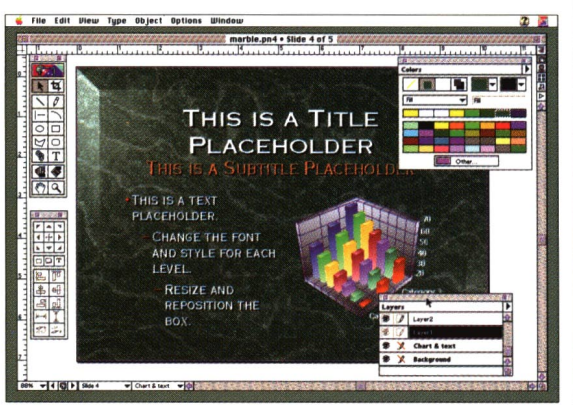
By Kelly Ryer

After a long dry spell, Persuasion is about to get an upgrade. Last revised in 1994 by previous parent Aldus Corp., the package will return to the presentation market when Adobe Systems Inc. ships Version 4.0 in the fourth quarter.

Much has changed in the past two years, as the Web has made an indelible mark on presentations. Integration with Web authoring and links, interaction with other Adobe applications, and an increased focus on cross-platform solutions are all elements of Version 4.0, Adobe said.

Now in beta testing, Persuasion 4.0 will be refitted for Adobe's

See Persuasion, Page 76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THIS IS A TEXT PLACEHOLDER
CHANGE THE FONT AND STYLE FOR EACH LEVEL.
RESIZE AND REPOSITION THE BOX.

Persuasion 4.0 ships with templates like this one and sports a new Adobe look. Shown are the Tools, Colors and Layers palettes.

Channel switch for Mac wares to aid small fry

By John Poultney and David Morgenstern

Apple in October will take the wraps off a revamped distribution strategy. While few details are available, the plan will prompt the company to pay more attention to smaller stores and value-added resellers.

According to Robin Abrams, vice president for the Apple Americas division, the company has not "modernized" its distribution strategy in three to five years. "We've been analyzing where we are and where we want to be," she said.

Apple sales executives met with both large and small vendors earlier this month at Macworld Expo. In recent months the latter group has been increasingly vocal about

See Channel, Page 80

NEWSPAPER PERIODICALS

WHICH MAC SHOULD YOU BUY?

FIVE MICE SYSTEMS ARE A G

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MACUSER ONLINE MACUSER LABS CPU REPORT CARD

MacUser's New Mac Ratings

Sort by: CPU Name	MacBench 3.0 Processor Score	Rating	Est. Street Price
PowerTower Pro 225/RAID	48	♦♦♦♦♦	$6,230
PowerTower Pro 225	48	♦♦♦♦♦	$5,235
PowerBase 240	33	♦♦♦♦♦	$2,195
PowerBase 180	29	♦♦♦♦♦	$1,495
PowerTower Pro 200/RAID	47	♦♦♦♦½	$5,730
PowerTower Pro 200	47	♦♦♦♦½	$4,735
PowerTower Pro 180/RAID	42	♦♦♦♦½	$5,430
PowerTower Pro 180	42	♦♦♦♦½	$4,435
PowerTower 200e	47	♦♦♦♦½	$3,824
PowerBase 200	30	♦♦♦♦½	$1,795
PowerTower 180e	45	♦♦♦♦	$3,524
Power Macintosh 9500/200	41	♦♦♦♦	$4,899
Power Macintosh 8500/180	34	♦♦♦½	$4,499
Performa 6400/200	27	♦♦♦½	$2,799
Performa 6400/180	19	♦♦♦½	$2,399
PowerCenter 150	31	♦♦♦	$2,095
PowerCenter 132	27	♦♦♦	$1,895
Power Macintosh 8500/150	27	♦♦♦	$3,599
Power Macintosh 7600/132	26	♦♦♦	$2,999
Power Macintosh 7200/120	19	♦♦♦	$2,299

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AT DEADLINE

CodeWarrior to plug into Sony PlayStation

Metrowerks Inc. plans to ship a version of CodeWarrior that will create applications for Sony Corp.'s PlayStation game console. Due by the end of September, the PlayStation version of Metrowerks' development environment will include a special MIPS compiler, linker, debugger and conversion tools.

The company said it will ship the PlayStation version for Windows in the fourth quarter, when it releases the Windows 95 and NT editions of CodeWarrior.

Metrowerks Inc. of Austin, Texas, is at (512) 873-4700 or (800) 377-5416; fax (512) 873-4900; info@metrowerks.com; http://www.metrowerks.com. □

CompuServe announces $29.6 million loss, layoffs

CompuServe Inc. last week reported a larger-than-expected loss of $29.6 million for its first quarter, which ended July 31. The company also announced that it will eliminate 150 jobs and sell the corporate software group of its Spry Inc. division.

The online service last month had predicted a loss between $14 million and $19 million. CompuServe said that it expected the losses to continue in the second quarter because of the cost of launching its teen-oriented WOW! service and Version 3.0 of the CompuServe software. It did lose $17 million from operations, but then took additional charges against earnings to pay for restructuring.

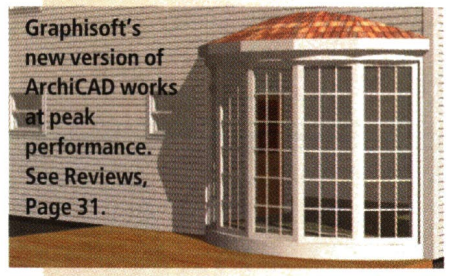
The Columbus, Ohio-based company's first-quarter loss — its first since going public — was a drastic reversal from the same quarter last year, when the company turned a $26.8 million profit. Revenues were $208.6 million, compared with $186.5 million for the year-ago quarter.

As part of a plan that aims to cut costs by $30 million a year, CompuServe will lay off 150 workers, or 4 percent of its work force, and sell a portion of its Bellevue, Wash.-based Spry Inc. division, which CompuServe acquired last year.

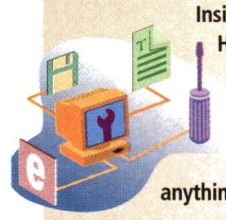
The Internet arm of Spry will remain a part of CompuServe as the company tries to migrate its proprietary online service technology to Internet standards. As of July 31, CompuServe's membership also dipped, to 3.3 million. On June 30, the service had 3.4 million. Chief rival America Online Inc. has 6.2 million users. □

To our readers

MacWEEK will not publish Sept. 2. Look for our expanded pre-Seybold San Francisco issue Sept. 9, which will include a MacWEEK Guide to Internet Publishing, a GA Extra on illustration programs and an expanded Reviews section with a real-world test of the Apple Network Server 700 in a publishing environment. □



Graphisoft's new version of ArchiCAD works at peak performance. See Reviews, Page 31.



Insider Software releases HyperBox 1.0.1, an extension that lets users create hyperlinks from a text document to almost anything. See News, Page 8.

Open Transport betas help to shake out bugs and move the Mac OS out the door. See MacInTouch, Page 37.

The big picture: MediaAssets 1.5, a high-end multimedia management system, is slated to ship in September. See GA, Page 10.

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Graphisoft ArchiCAD 5.0 hits roof with unique productivity tools • UMAX PowerLook 2000 a great pre-press scanner, includes useful bundled software • ARA MultiPort Server fast but flawed

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When putting together CAD tools, users seem to be evenly split between all-in-one applications and best-of-breed products.

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THIS WEEK ONLINE

Small awards

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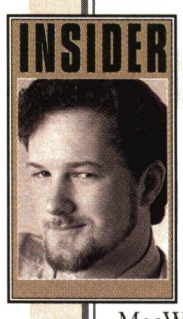
The latest news online

Steamed Crabb rolls out more awards for the little guys who make the Mac special. ... Mac the Knife message boards are up and rolling. Stop by and spill a little dirt — you could earn a mug. ... Want to keep up with the latest headlines? Join the MacWEEK mailing list and you'll find out what's new on the site every Monday. ... Find out what's hot in the MacWEEK list of top-selling hardware and software.



MacWEEK Insider

They're really fighting back for Mac: Employees inside large organizations have been able to stall and even reverse executive decisions to phase out the Mac in favor of Windows machines. MacWEEK Executive Editor/News Stephen Howard examines the arguments for and against the efficiency of platform standardization.

Where to find us online

MacWEEK reports the news every day, and you can find the latest stories on the Web at www.macweek.com. On CompuServe, the news is free at go zmc:mwnews, and you can visit the MacWEEK Forum to discuss the events of the day at go zmc:macweek.

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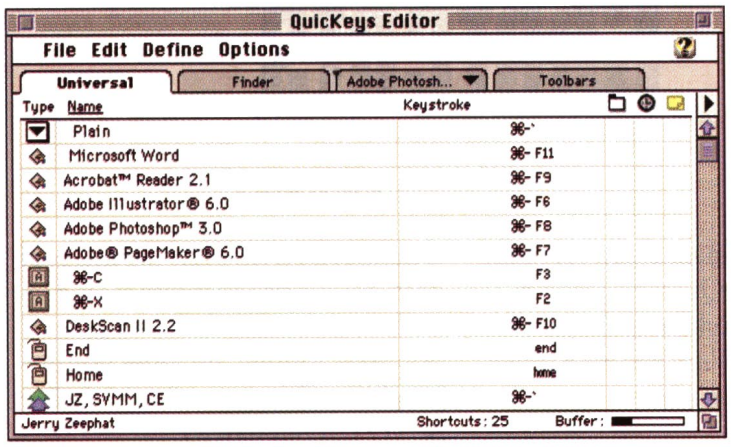


The latest version of QuicKeys gives users several methods for triggering shortcuts and features a new, tabbed interface for editing shortcuts.

'Key' vendors ship Mac macros

By Marty Cortinas

Working on the Mac became a little less tedious last week with the release of two automation utilities.

▸ **QuicKeys 3.5.** CE Software Inc. delivered the long-awaited QuicKeys 3.5, putting a new tabbed interface, batch processing and more powerful sequence recording into the package.

Users can now trigger shortcuts via three types of tool bars and palettes: floating, embedded and Click-and-Go. The last type is summoned via a keystroke and disappears when the user clicks on the chosen shortcut icon.

This release contains only 680x0 code. The company said it expects to ship a Power Mac-native version of QuicKeys 3.5 in about 45 days. Users who buy Version 3.5 will be able to download the Power Mac version free.

QuicKeys 3.5 has a suggested retail price of $119. Users of Version 3.0 can upgrade for $35.95; upgrades for previous versions cost $45.95. CE Software also offers a competitive upgrade for $49.99.

▸ **KeyQuencer 2.0.** Binary Software Inc. released KeyQuencer 2.0, a commercial version of the shareware macro maker.

Version 2.0 includes more than

See Automation, Page 6

Great Plains revives Mac line

By John Poultney

In a shot of good news for the Mac accounting market, Great Plains Software Inc. has done an about-face on its earlier announcement that it would end support for its Mac accounting product by May of next year. The company promised a maintenance release of its Great Plains Accounting package.

"We took a second look at the marketplace," a Great Plains spokeswoman said, "and we think the Mac is still a very viable platform." She added that the company has formed a separate business unit to focus on Mac business and to work directly with Apple.

The company set an October ship date for Great Plains Accounting 7.2, a maintenance release for the 22-module package. The release will focus on user-reported incompatibilities, printing problems and bugs, according to Great Plains.

Version 7.2 will be followed by a major revision, but a release date has not been set, the company said.

Great Plains Software Inc. of Fargo, N.D., can be reached at (701) 281-0550 or (800) 456-0025; fax (701) 282-4826; http://www.gps.com. □

SyQuest posts loss, preps SyJet

By John Poultney and Stephen Howard

Syed Iftikar, the founder of removable-storage vendor SyQuest Technology Inc., resigned from the company's board of directors this month. Iftikar cut his last management ties with the struggling company just days after SyQuest reported a large third-quarter loss.

Company officials said SyQuest's course is unchanged and that it will release the 1.3-Gbyte SyJet removable drive next month.

SyQuest filed documents with the U.S. Securities and Exchange Commission Aug. 14 that reported a $41 million loss on total revenues of $29.5 million. For the third quarter of fiscal 1996 ended June 30, SyQuest's sales dropped 57 percent compared with the year-ago period, while the number of drives sold plunged 79 percent compared with the second quarter.

As of June 30, the SEC filing stated, SyQuest did not meet the

See SyQuest, Page 6

Powersoft readies native PowerBuilder

Client-server tool will use less RAM

By Clifford Colby

Following on the heels of its first Mac release this past winter, Powersoft Business Group said it is now beta testing the next version of PowerBuilder for the Mac.

Powersoft said it plans to ship a new Mac version of its object-oriented, client-server development tool by the end of the year. The update, Version 5.0, will fill several holes in the initial Mac version. The company said the update will run native on Power Macs; the initial release was available only in a 680x0 version. The company said Version 5.0 will come with improved memory management and use significantly less RAM on a Power Mac than Version 4.0 does on a 680x0 Mac.

The upcoming version will let Mac PowerBuilder clients access server applications on non-Mac platforms, Powersoft said. The Mac version, however, won't be able to act as a PowerBuilder application server.

According to the company, the update will use a version of Metrowerks Inc.'s CodeWarrior C/C++ compilers and linkers to generate compiled code in PowerBuilder. Version 5.0 will also include an enhanced editor for PowerScript, the tool's development language, and an improved object browser for navigating through components.

Version 5.0 will come with the latest edition of InfoMaker — Powersoft's tool for creating reports, queries and business graphics — and Version 5.0 of the SQL Anywhere database.

Powersoft said pricing for the Mac version will be consistent with its other versions.

Powersoft Business Group, a division of Sybase Inc., of Concord, Mass., can be reached at (508) 287-1500 or (800) 395-3525; fax (508) 369-3997; http://www.powersoft.com. □

Extras pump up Corel's WordPerfect 3.5

By John Poultney

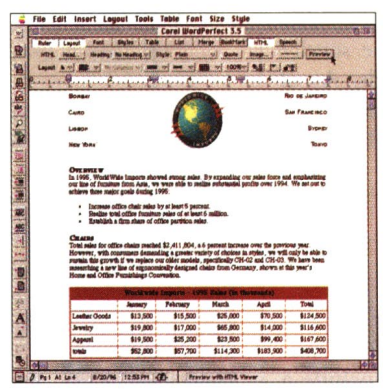
Corel Corp. announced it is re-releasing its WordPerfect 3.5 application with a host of ancillary tools aimed at making the software a minipublishing package. The update will also fix about 30 user-reported problems in the last version from previous owner Novell Inc., Corel said.

Slated to ship at the end of the month, the WordPerfect package will include Netscape Navigator 2.02 browser and will come with an integrated HTML export function, which will now automatically convert PICT files to JPEG images; the previous version required a separate utility for this function.

WordPerfect 3.5 will also include 5,400 clip-art images, 200 stock photos, 67 sounds, 187 textures and more than 150 TrueType fonts. Corel will also bundle French, German and Spanish language-conversion utilities that were previously available as separate, $99 options.

To help coordinate all these extras, the company will bundle ALSoft Inc.'s MasterJuggler 2.0 Pro, a utility that manages fonts, sounds and desk accessories.

The release will cost $249. Registered users can upgrade for $89. Owners of the Novell-issued Version 3.5 can obtain a replacement CD-ROM for $24.95 or can download a free updater from Corel's Web site.



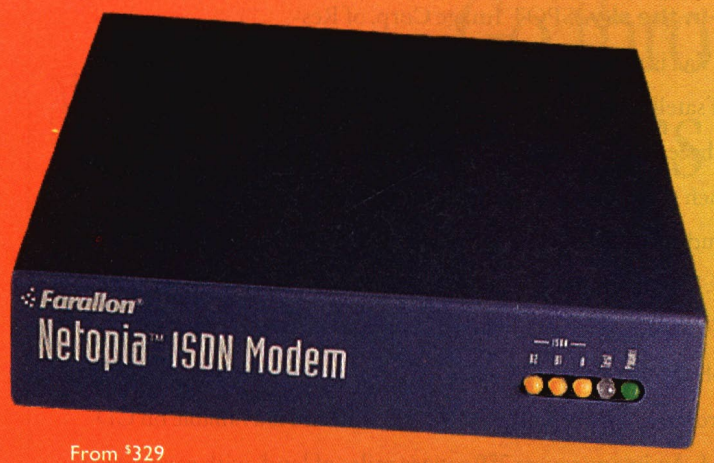
WordPerfect's new HTML functions will convert PICT graphics to JPEG. The Preview button will display the document in a browser before conversion.

Corel said the updater will differentiate between 680x0 and Power Macs, installing only the needed code. However, it will not contain the ancillary programs included with the full release. Only the main program will be updated.

Corel said a WordPerfect 3.5 network install — available as a Custom Install option with either the standard release or the updater — will enable multiple users to access a fat-binary version.

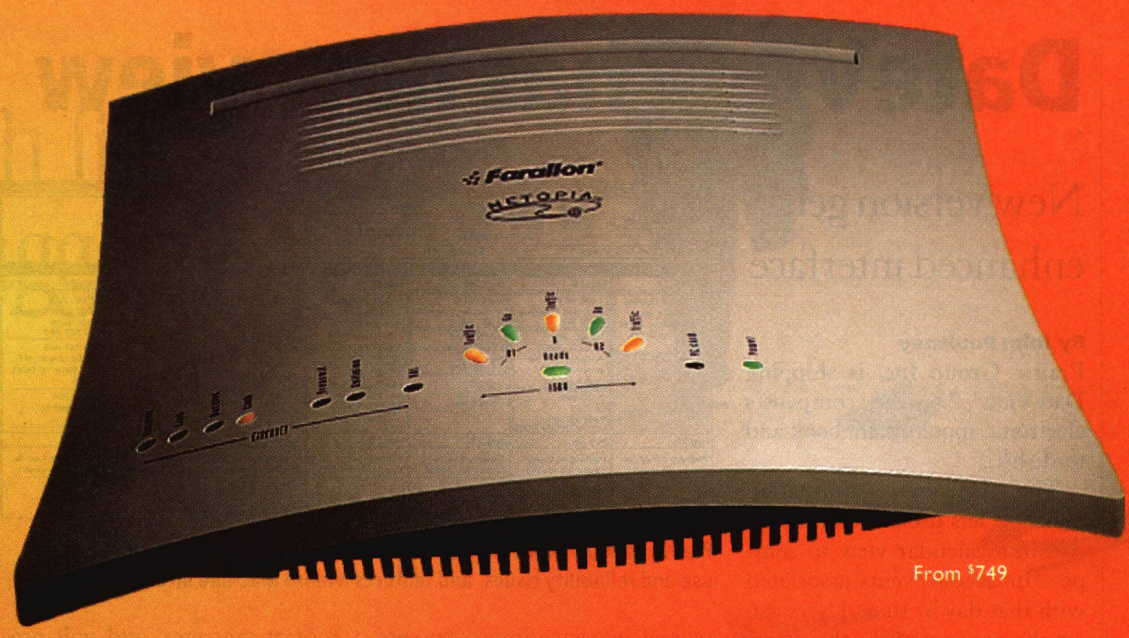
Corel Corp. of Ottawa can be reached at (613) 728-8200 or (800) 772-6735; fax (613) 761-9176; custserv@corel.com; http://www.corel.com.

Netopia ISDN Modem
high-speed individual net access



From $329

Netopia Internet Router
high-speed access for your entire office



From $749

Certain moments in life are slow & painful. Surfing the web shouldn't be one of them.

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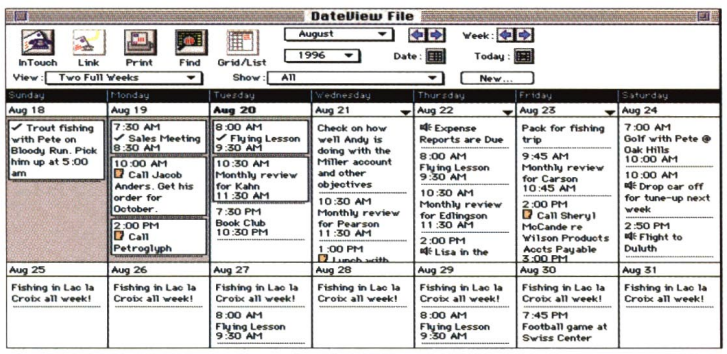
DateView has new view

New version gets enhanced interface

By John Poultney

Prairie Group Inc. is shipping DateView 2.6, the company's electronic appointment book and to-do list.

The personal information manager lets users click on days within a calendar view to compose or access events associated with that day or time. Users can set the range of viewable dates from a single day to five weeks, the company said. Standard calendar amenities, such as reminders and the capability to print in paper-based organizer formats, are also included.



Prairie Group's DateView 2.6 calendar program addresses earlier ease-of-use and reliability issues, and features a more Mac-like interface.

Prairie said the update features several interface improvements, including rearranged and relabeled application buttons. Prairie said it also boosted DateView's reliability and improved its notification capabilities. The update has tighter integration with InTouch, the company's contact manager, and will provide new printing formats.

Prairie Group Inc. of West Des Moines, Iowa, is at (515) 225-3720 or (800) 346-5392; fax (515) 225-2422; prariesoft@applelink.apple.com; http://members.aol.com/prairiesft. □

SyQuest

From Page 4

capital or tangible asset requirements for continued listing on NASDAQ, although the company is still listed on the stock exchange. In June, SyQuest tried to boost its net worth by issuing $20 million in stock (see 06.24.96, Page 4).

Iftikar, who started SyQuest in 1982, was replaced as CEO in June, following a $51.1 million Q2 loss and subsequent executive shake-up (see 06.24.96, Page 4, and 05.13.96, Page 4). He had not been involved in day-to-day business for the previous two months, according to Jim Porter, an analyst at Disk/Trend Inc., a storage market research company in Mountain View, Calif.

"Syed's departure will not affect SyQuest's current strategies or executions," Porter said. "They've been attempting to turn the situation around for some time, most significantly in fighting loss of market share to [Iomega Corp.'s] Zip and Jaz products."

SyQuest declined to comment on Iftikar's departure, but Chief Financial Officer John Luhtala said the company is sure of its new management team and that it will achieve a turnaround. "We're confident in the marketplace for large-scale storage, particularly with the large files generated in the multimedia field," he said.

To this end, SyQuest said it began taking orders for its 1.3-Gbyte SyJet drive last week and expects to ship initial units in September.

SyJet, SyQuest's entry into the large-scale removables market, uses proprietary dual-platter cartridges with 650-Mbyte and 1-Gbyte capacities (see 01.08.96, Page 4).

SyQuest said the drive, originally announced earlier this year, was delayed because of resourcing priorities. Initial configurations will include an internal and external SCSI model, with an optional converter cable for use with parallel systems. SyQuest said it will ship an internal IDE (Integrated Drive Electronics) version in a few months.

SyQuest Technology Inc. of Fremont, Calif., can be reached at (510) 226-4000 or (800) 245-2278; fax (510) 226-4102; http://www.syquest.com. □

Automation

From Page 4

260 ready-made macros and nearly 70 commands.

Users can execute any KeyQuencer macro remotely on any Mac over AppleTalk. Version 2.0 also has links to Now Software Inc.'s Now Utilities, Claris Corp.'s FileMaker Pro, AppleScript and Apple's Control Strip. A batch processor allows users to selectively apply macros to groups of files.

KeyQuencer 2.0 costs $39.95; registered users of Version 1.2 can upgrade for $29.95.

CE Software Inc. of West Des Moines, Iowa, can be reached at (515) 221-1801 or (800) 523-7638; fax (515) 221-1806; http://www.cesoft.com.

Binary Software Inc. of Santa Monica, Calif., can be reached at (310) 449-1481 or (800) 824-6279; fax (310) 449-1473; keyquencer@binarysoft.com. □

For the record

Contrary to previous company statements, Jump Development Group Inc. will no longer distribute the older version of RAM Charger, as reported in the 08.19.96 story on the software (Page 4).

Another story in the 08.19.96 issue mischaracterized the pricing of Spider Island Software Inc.'s TeleFinder (Page 26). Upgrades to Version 5.1 are free to users who purchased Version 4.0 or later; upgrades cost $95 for purchasers of Version 3.5. In addition, the headline should have said the product supports HTTP 1.1.

The photo of the bungee jumper that appeared on Page 1 of the 08.12.96 issue should have been credited to photographer Rosemary Tufankjian.

Also in the 08.12.96 issue, the story on color peripherals from Canon U.S.A. Inc. and Epson America Inc. (Page 1) should have listed the manufacturer of the PostScript software RIP option as Birmy Graphics Corp.

SCIENCE & TECH

Eye in the sky. SPOT Image Corp. of Reston, Va., is now shipping a library of off-the-shelf satellite images of U.S. cities. Taken by the three SPOT satellites owned by the French space agency, Centre National d'Etudes Spatiales, each MetroView costs $495. The MetroViews each offer a black-and-white image digitized in SPOT's own format, which is viewable with most GIS (geographic information system), CAD and graphics applications. Each MetroView is 6 to 10 Mbytes, SPOT said, and is available on CD-ROM. An image covers 250 square miles of land, with each pixel representing a 10-by-10-meter area.

SPOT said the images are detailed enough to delineate features such as roads, houses, boundaries and industrial areas. Phone (703) 715-3100 or (800) 275-7768; fax (703) 648-1813; http://www.spot.com.

Number crunchers. TCI Software Research of Las Cruces, N.M., is readying revisions to two of its word processing applications.

The first, Version 2.5 of Scientific Word, is an update of the company's technical word processor and is available now for $375, TCI said. The second, Scientific Workplace 2.5, is an enhanced version of Scientific Word that will ship in September for $595.

Both will be Power Mac-native, TCI said, and support hypertext links and multiple-window interfaces, which allow users to work on several documents simultaneously. The updates will also let users mix complex scientific and mathematical notation in the same document, TCI said. In addition, users will be able to create links to Wolfram Research Inc.'s Mathematica 2.2.3 and Waterloo Maple Inc.'s Maple math applications. Phone (505) 522-4600 or (800) 874-2383; fax (505) 522-0116; infodm@tcisoft.com; http://www.tcisoft.com.

Plotting strategy. Cherwell Scientific Publishing Inc. of Palo Alto, Calif., released Version 5.0 of Pro Fit, its $299 graphing and data-analysis package. The update is scriptable via Apple events and comes with support for several other Apple technologies, including Apple Guide, QuickDraw GX and QuickDraw 3D, Cherwell said. Version 5.0 offers a preview window, full-color graphing, new zooming capabilities and probability scaling, as well as the capability to plot with multiple axes, the company said. Phone (415) 852-0720; fax (415) 852-0723; csp.usa@cherwell.com; http://www.cherwell.com/cherwell.

Straight into your mind. IBVA Technologies Inc. of New York is now shipping four new hardware plug-ins for its brain-wave control system. The IBVA (Interactive Brainwave Visual Analyzer) system is a Mac EEG hooked to a headband, a wireless transmitter, receiver and software that analyzes electroencephalographs (EEGs).

According to the company, the four Expansion Paks allow the IBVA to control video games, virtual-reality applications and common household devices. Phone (212) 754-4282; fax (212) 759-5080; http://www.opendoor.com/pagoda/ibva.html.

— By Leander Kahney

Go through life with less baggage.

Introducing the MessagePad 130 with Newton 2.0.

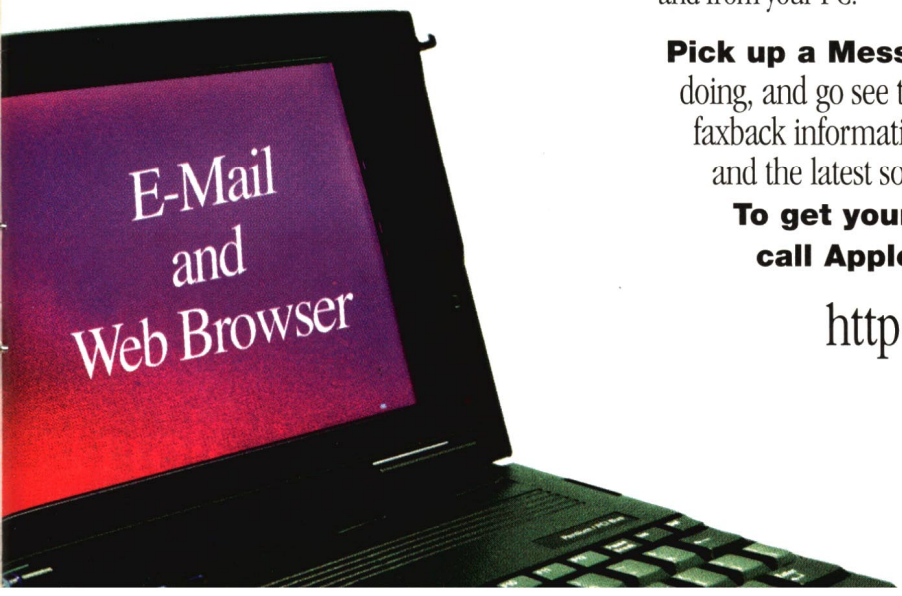
The farther we go, it seems, the more we're asked to bring with us. The names and numbers of clients past and present. Dates, times, and notes from countless meetings. Not to mention a way to get your e-mail.

The new Apple® MessagePad® 130 was designed to lighten your load by making it easier than ever to schedule work, take notes, send and receive e-mails and faxes—or hop on the Internet—from wherever you happen to be. Even in the dark, thanks to its backlit screen.

`http://www.info.apple.com`

The Newton 2.0 operating system: learn less, do more. The award-winning Newton® 2.0 provides a surprisingly familiar way of working that encapsulates all you do now in a simpler, more concise form. Instead of loading you with complex commands, Newton works the way you do. It even reads your handwriting.

Dozens of new and well-known applications, such as Now Contact, ACT!, Quicken, CompuServe, Meeting Maker, and Eudora Pro, are available for Newton, with more coming. Making it easy to transfer information to and from your PC.



Pick up a MessagePad and get going! So put down whatever you're doing, and go see the Apple MessagePad 130 at your nearest dealer. Or get our faxback information kit, with details on the complete line of MessagePad products and the latest software. See just how little you have to carry, to have it all.

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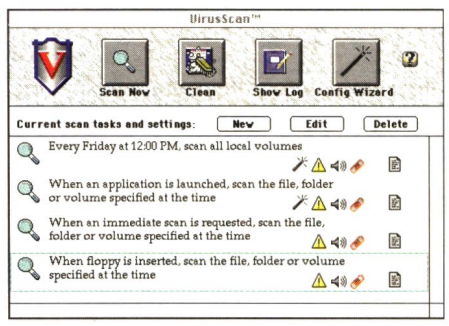
McAfee spreads VirusScan 2

The Mac world was made a little safer this month when McAfee Associates Inc. shipped the latest version of its VirusScan antiviral utility.

In addition to the previous protection against conventional viruses, the $65 VirusScan 2.0 guards against scripting viruses that infect Microsoft Word and HyperCard documents, the company said (see 01.22.96, Page 71). It can also protect systems from Trojan horses.

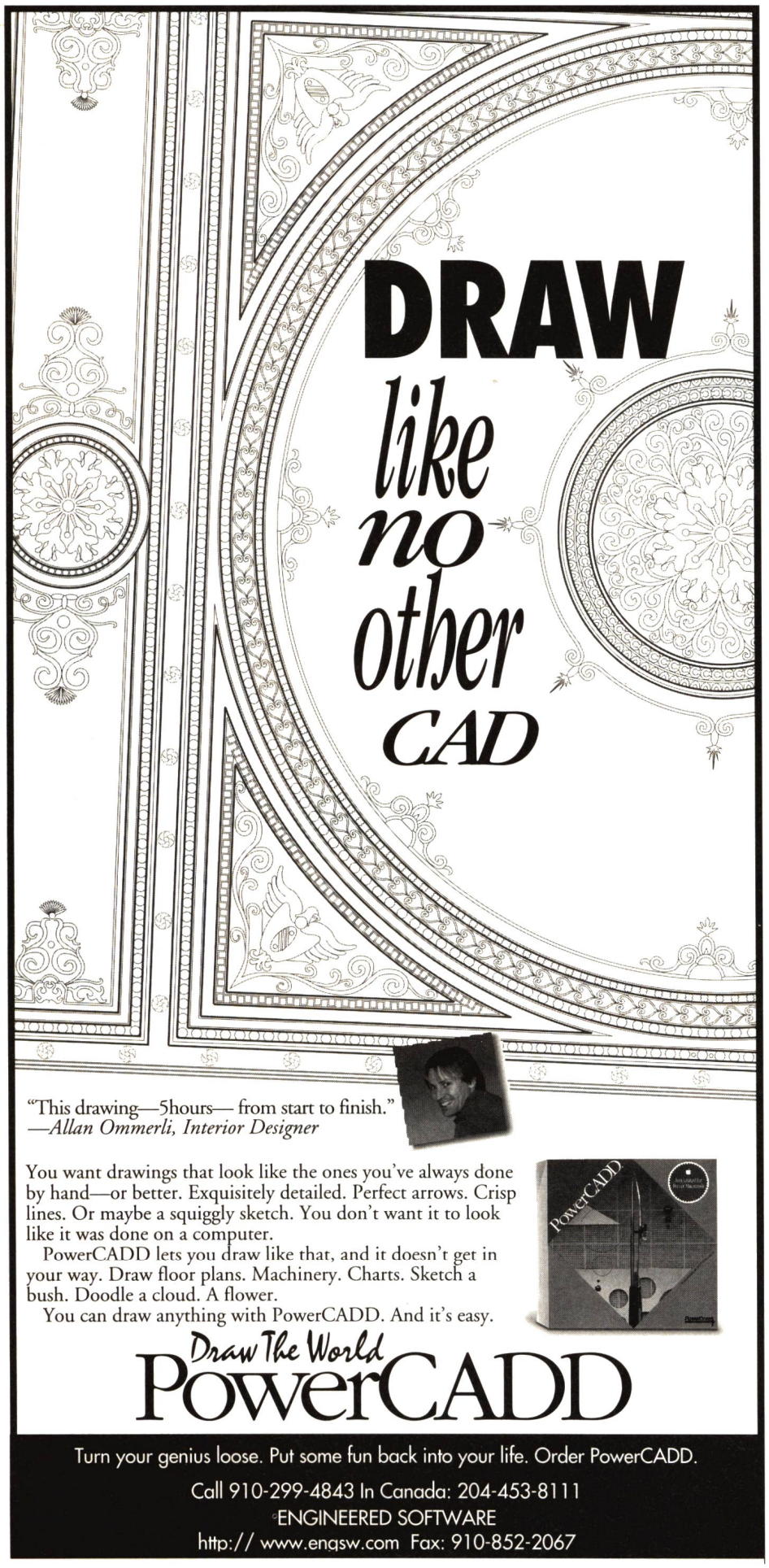
Version 2.0's new Task Manager allows users to set which events will trigger a virus scan. These events include the insertion of a floppy disk, file modification, system start-up and shutdown, and file launch.


VirusScan™
Scan Now
Clean
Show Log
Config Wizard
Current scan tasks and settings:
New
Edit
Delete
Every Friday at 12:00 PM, scan all local volumes
When an application is launched, scan the file, folder or volume specified at the time
When an immediate scan is requested, scan the file, folder or volume specified at the time
When floppy is inserted, scan the file, folder or volume specified at the time

VirusScan 2.0 lets users set when a scan will be initiated and what actions the program will take when it encounters a virus.

Users of previous versions can update for $49; the price includes a year of support. The company offers a yearly support and update service for $49; a 100-user site license costs $3,800, which includes two years of updates and support.

McAfee Associates Inc. of Santa Clara, Calif., can be reached at (408) 988-3832; fax (408) 970-9727; http://www.mcafee.com. □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like no other CAD
"This drawing—5hours— from start to finish."
—Allan Ommerli, Interior Designer
You want drawings that look like the ones you've always done by hand—or better. Exquisitely detailed. Perfect arrows. Crisp lines. Or maybe a squiggly sketch. You don't want it to look like it was done on a computer.
PowerCADD lets you draw like that, and it doesn't get in your way. Draw floor plans. Machinery. Charts. Sketch a bush. Doodle a cloud. A flower.
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Ballard's d-Time speeds access to CD-ROM data

By John Poultney

Ballard Synergy Corp. is now shipping its d-Time for Macintosh, its software for accelerating CD-ROM drives.

The $50 d-Time, formerly available only for the Windows platform, creates what the company calls an acceleration file on the host system's hard disk, which stores frequently accessed CD-ROM data. Ballard said that using this file instead of reading directly from the CD-ROM can speed drive operations by as much as 50 times, depending on processor and drive speed.

The company said there is a cost, in terms of disk space, to the acceleration: The default size of the file is 20 Mbytes and the minimum space required is 5 Mbytes. According to the company, the size varies with the number of CD-ROMs used on a system and the complexity of the applications. The software supports as many as four concurrently operating drives.

d-Time also creates files called Timelogs to expedite data flow, the company said. These small files — typically less than 10 Kbytes, Ballard said — are location indexes to information on the CD-ROM and serve to swap information into and out of the acceleration file based on usage patterns. The software ships with more than 200 Timelogs for game and reference titles and can create new ones as CD-ROMs are used, the company said. More than 100 of these files are available on Ballard's Web site.

Ballard Synergy Corp. of Poulsbo, Wash., can be reached at (360) 697-9260 or (800) 754-1128; fax (360) 598-2450; support@ballardsynergy.com; http://www.ballardsynergy.com. □

UTILITIES BEAT

Getting hyper. Insider Software Co. of San Diego has released HyperBox 1.0.1, an extension that lets users create links from any document to files, applications and Internet resources. Users access links by highlighting linked text and hitting a hot key. It then launches the specified object. HyperBox costs $39.95. Phone (619) 622-9900; fax (619) 622-9923; rio@theinside.com; http://www.theinside.com.

Symantec goes live. Symantec Corp. of Cupertino, Calif., recently introduced an automated system for distributing software updates. LiveUpdate is first being implemented in the company's Norton AntiVirus utility and ACT! contact manager. When the LiveUpdate button is clicked, a wizard works in the background to connect to the Symantec site and download specified files. Phone (541) 334-6054 or (800) 441-7234; http://www.symantec.com.

Hands off. Blue Globe Software of Victoria, British Columbia, has a solution for users who don't want others messing with their keyboard. Keys Off 1.0 is a control panel that locks the Mac's keyboard and mouse. Users type in a password to regain access. Keys Off is shareware and costs $10 to register. Contact cliffmcc@blueglobe.com; http://www.islandnet.com/~cliffmcc/homepage.html.

Grand opening. Abbott Systems Inc. of Pleasantville, N.Y., has updated CanOpener, its universal file opener, to Version 3.5. CanOpener now opens JPEG and PhotoCD files. The utility reads more than 30 picture formats, converts pictures between formats and can extract Internet addresses from any text file. CanOpener is $65; registered users can upgrade for $32. Phone (914) 747-3116 or (800) 552-9157; fax (914) 747-9115; abbottsys@aol.com; http://www.abbottsys.com.

— By Marty Cortinas

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Now it's easy to *triple* your memory with software and without the headache of tearing your Mac apart. New RAM Doubler™ 2 is the improved version of RAM Doubler, one of the highest-rated and best-selling Mac utilities ever with more than *one million* sold. RAM Doubler 2 is faster, offers flexible memory settings and keeps those memory hungry apps at bay. RAM Doubler 2 lets you run more programs at once, work faster and work smarter. Get the most out of your Mac with new RAM Doubler 2.

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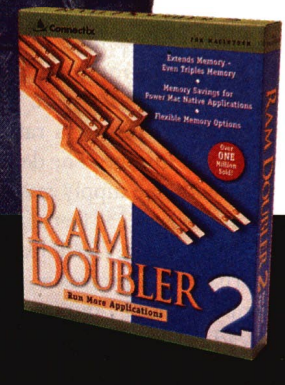

Triple Your Memory With New RAM Doubler 2

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SHOW OF BRAVADO

Truevision Inc. shipped its $1,095 Bravado 1000 PCI-based Motion-JPEG card with Adobe Premiere 4.2.

CAD apps remodeled

Engineered, IMSI deliver upgrades

By Kelly Ryer

CAD applications are breaking new ground thanks to revamped versions of Engineered Software's PowerCADD and International Microcomputer Software Inc.'s TurboCAD.

Engineered Software further blurred the line between CAD and illustration last week when it shipped Version 3.0 of PowerCADD and Version 2.0 of its WildTools plug-in.

According to the company, the $795 PowerCADD 3.0 is now fully Power Mac-native. It features multiple undos and remembers up to seven nudge amounts.

Among the new illustration features is an Eyedropper tool for manipulating colors and fills. Users can now create custom color palettes and assign names or reference numbers to individual colors.

"The thing that separates PowerCADD from the other Mac apps for me is the dynamic grid maps," said Eric Swartz, president of Desert Cryogenics LLC of Tucson, Ariz., a manufacturer of low-temperature equipment. "They work. They don't work nearly as well in other apps. I've seen people using AutoCAD. ... They're still drawing lines and typing things like 'm-o-v-e' for move.

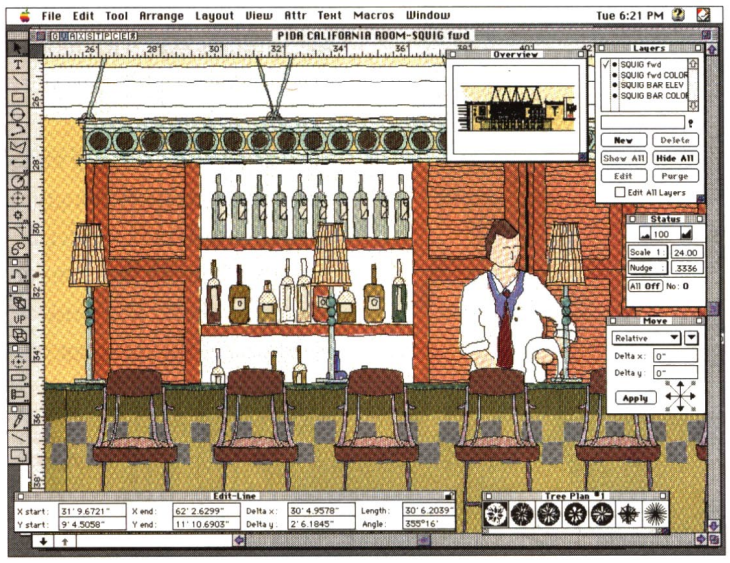
"It's not a toy — the whole point of CAD is to 'lay lead,' and PowerCADD is fast," Swartz said.

A new floating Symbol palette provides access to libraries of CAD symbols. The program now supports the standard CAD format of DXF (Drawing Interchange File) as well as JPEG.

Upgrades from the Power Mac-only PowerCADD 2.0 are $129, with an introductory price of $99 until Sept. 10.

A new Squiggle command is the highlight of WildTools 2.0, Engineered Software's PowerCADD plug-in. Squiggle will alter straight lines to look as though they've been sketched, making preliminary ar-

See CAD, Page 12



The Squiggle command in WildTools 2.0 makes solid lines in PowerCADD 3.0 look like sketches. The new Symbol palette is visible in the lower right.

ScanView prepares 'green' DotMate 7500 imagesetter

By Matthew Rothenberg

ScanView Inc. in September will roll out a new four-up drum imagesetter that the company said offers an environmentally friendly twist on film processing.

Originally slated to ship in November 1995, the DotMate 7500P is now set to ship at Seybold San Francisco for $120,000. The device handles film measuring up to 29.5 inches long and 16 to 21.6 inches wide at a maximum resolution of 3,600 dpi, ScanView said.

It outputs film at a rate of 8.3 inches per minute. The device will come with one supply cassette that accommodates 254 feet of film.

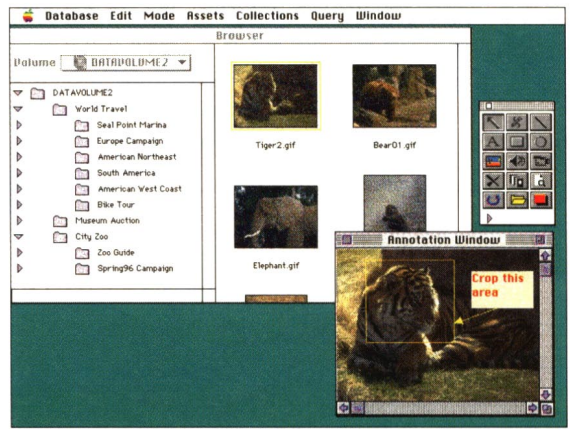
The DotMate 7500P features an internal film processor that the company said minimizes the spread of hazardous chemicals. A process called Silver Saver reclaims silver lost when film is exposed. In addition, a Green Quality module allows the imagesetter to run without being connected to external plumbing, drainage or ventilation systems, ScanView said.

The company will also offer the DotMate 7500SA, a $95,000 version that lacks the film processor.

The DotMate 7500 devices will ship with RipMate, a Windows NT-based software RIP developed by Harlequin Inc. of Cambridge, Mass. The software retails for $14,500.

Users will also be able to purchase the Bacher Control 2000, a punch-registration system.

ScanView Inc. of Foster City, Calif., can be reached at (415) 378-6360; fax (415) 378-6368. □



MediaAssets 1.5's high-end multimedia management system, due to make its Mac debut in September, will handle thousands of files along with a variety of associated data.

MediaWay to direct multimedia assets

By Rebecca Gulick

MediaWay Inc. this week is slated to announce the Mac debut of MediaAssets, the company's high-end multimedia management system.

Originally set for a March debut, the Mac version of MediaAssets is now scheduled to ship in September as Version 1.5. Like the original MediaAssets for Windows, the Mac version will start at $10,000 for a five-user client-server package.

The cross-platform software will target users who need to manage thousands of multimedia elements, or assets, and store a broad range of data with each file.

As in the Windows version, MediaAssets 1.5 for the Mac will let users drag and drop image, video and audio files into a database. The software will let users store unlimited sets of information with each asset, such as keywords, text descriptions and job tickets. Its interface will contain a Finder-like hierarchical folder system along with a window for viewing thumbnails of each file.

MediaAssets will feature a check-in and check-out system and version controls to prevent the loss of edits. Version 1.5 will let clients locate and download both high- and low-resolution images and annotate current and archived files.

"Because the data is being accessed simultaneously by clients,

See MediaAssets, Page 12

Microtek hones ScanMaker slide scanner

By Matthew Rothenberg

Microtek Lab Inc. in September will tone its slide scanner line with a new low-cost model.

The ScanMaker 35t Plus, which will fetch a street price of about $799, will replace the company's $749 ScanMaker 35t.

The new scanner is based on a 1,950-by-1,950-dpi CCD (charge-coupled device) array. It can capture 10 bits each of RGB information per pixel in a single pass, which it then optimizes to 24-bit color automatically. The 35t Plus scans up to 9,600 by 9,600 dpi via software interpolation, Microtek said.

The original ScanMaker 35t model requires three passes to capture eight bits each of RGB data per pixel at an optical resolution of 1,828 by 1,828 pixels.

The 35t Plus captures positive or negative transparencies measuring up to 36mm square and features a maximum dynamic range of 3.1. The device can scan one slide at maximum optical resolution in 57 seconds, the company said.

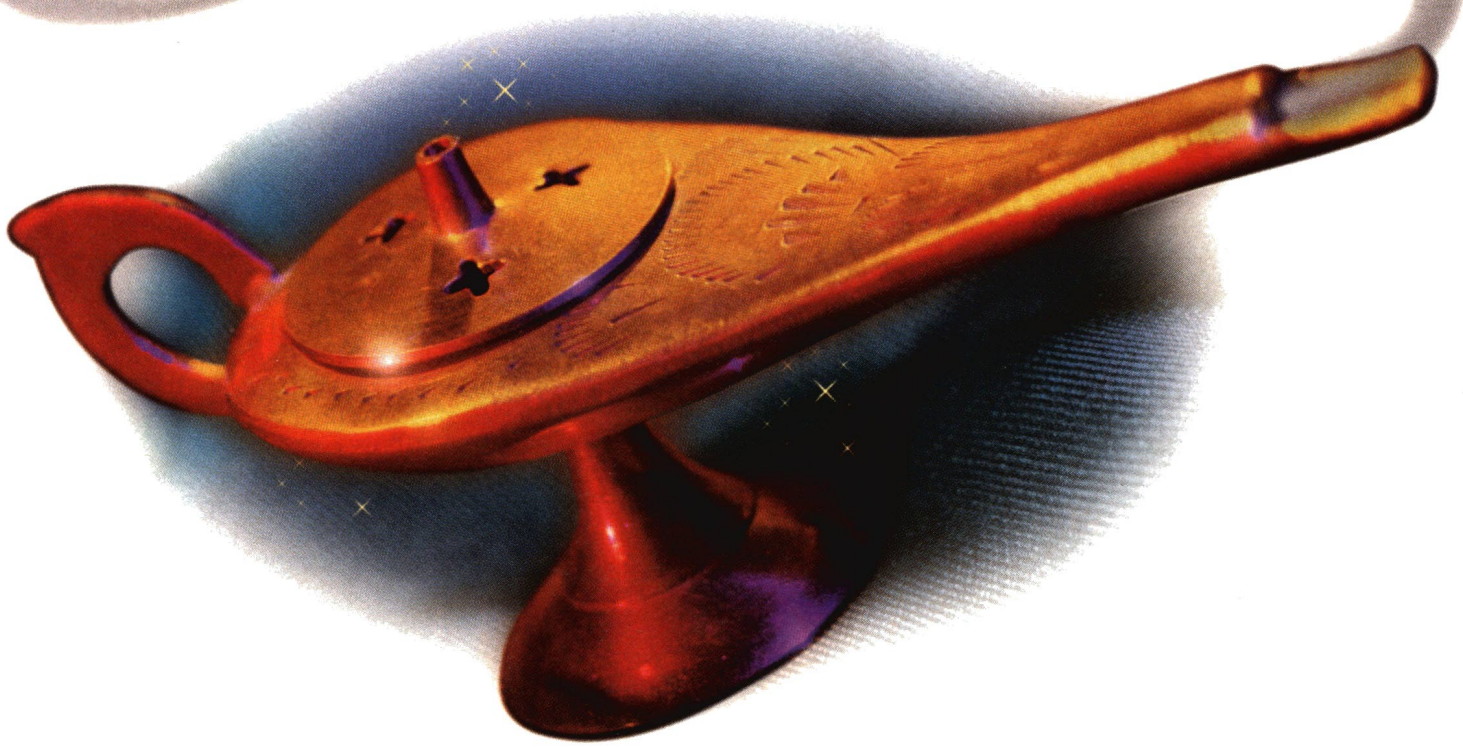
The ScanMaker 35t Plus can capture 35mm slides in 30-bit color at an optical resolution of 1,950 by 1,950 dpi.

The 35t Plus weighs less than 5 pounds and connects to users' Macs via a SCSI interface.

The device will ship with Microtek's ScanWizard image-capture module as well as Color It!, image-editing software from MicroFrontier Inc. (see 08.05.96, Page 16).

Microtek Lab Inc. of Redondo Beach, Calif., can be reached at (310) 297-5000 or (800) 654-4160; fax (310) 297-5050; http://www.microtekusa.com.

WEB/DATABASE MAGIC



INTRANET RAPID WEB APPLICATION DEVELOPMENT, EASY-TO-USE INTERFACE AND NO PROGRAMMING!

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Tango is an Intranet Rapid Application Development tool (IRAD) that allows you to quickly integrate your databases and Web servers through a visual drag and drop environment—without learning C/C++ or Perl. This opens up a world of opportunities: from on-line shopping systems, product catalogs and event registration, to telephone books, corporate manuals and training material.

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Why take days or even weeks creating Web applications? Tango lets you dramatically slash development time so you can accomplish in minutes what traditionally took weeks to complete. The result? You'll be able to get powerful, interactive applications up and running in less time. Tango connects to all popular databases, including Oracle, Sybase, Informix, Butler SQL and **FileMaker Pro**. And, it offers cross-platform functionality so you can use your application in practically any computing environment.

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Radius deals latest card

PCI model speeds big images for less

By Rebecca Gulick

Lengthening its line of high-end graphics accelerators, Radius Inc. recently shipped a new model that it said speeds performance and delivers the big picture.

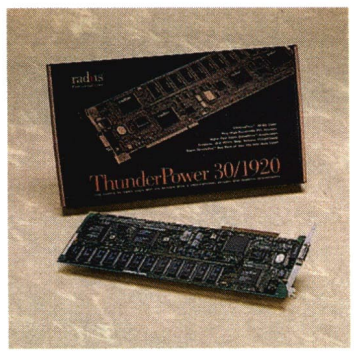
The ThunderPower 30/1920, $1,999, is a PCI card with 6 Mbytes of RAM that offers up to 35 percent more speed than the company's $1,199 Thunder 30/1600, Radius said. The new board is aimed at graphics users who seek more color accuracy and performance but don't require Adobe Photoshop acceleration. For Photoshop mavens, the company offers the $2,499 ThunderColor 30/1600.

Radius said ThunderPower can generate full-color graphics at resolutions ranging from 640 by 480 pixels to 1,920 by 1,080 pixels and refresh rates of 60 Hz. The maximum resolution of 1,920 by 1,080 pixels is an extra-wide, high-definition television-size aspect ratio that Radius said it expects to become a monitor standard.

The ThunderPower is based on a 30-bit digital-to-analog converter that the company said can improve color fidelity when used with a calibrator such as Radius' $799 ProSense Display Calibrator.

According to Radius, a proprietary 96-bit chip on the new card offers QuickDraw 2-D acceleration of scrolls, zooms and on-screen graphics. It also features hardware pan and zoom capabilities and on-the-fly bit-depth and resolution switching.

Radius Inc. of Sunnyvale, Calif., can be reached at (408) 541-6100 or (800) 227-2795; fax (408) 541-6150; support@radius.com; http://www.radius.com/. □



The ThunderPower 30/1920 PCI card is aimed at non-Photoshop graphics users seeking color accuracy.

Image Tech printer to handle 3-D media

By Matthew Rothenberg

Image Technology International Inc. is preparing to add a new dimension to printing from the Mac: 3-D output.

The company this month unveiled the 3D Digital Image Printing System, an $80,000 printer that Image Technology said will be available within four to six months.

The printer will be based on a proprietary CRT engine that will output 24-bit RGB images in three passes to special microlenticular material. By combining different image bands and integrating the image into the emulsion, the printer will generate 3-D images.

According to the company, the 3D Digital Image Printing System will output 3-D images measuring up to 5 by 7 inches at a rate of 20 prints per hour.

The device will connect to the Mac via an RS-232 serial interface, and the company plans to deliver it with drivers for Macs, Windows NT machines and Silicon Graphics workstations.

According to the company, prints will cost about 90 cents each. The system will require a Mac with 48 Mbytes of RAM, Image Technology said.

Image Technology currently offers 3-D prints and transparencies for users who send in files in a variety of formats, including TIFF, PICT, TGI and Softimage. Output costs start at $50 for a single 3.5-by-4.5-inch image and slide down to 65 cents each for 5,000 or more copies.

The company can generate 3-D transparencies measuring up to 40 by 80 inches. A single image at maximum size costs $1,152, and 5,000 or more transparencies at 40 by 80 inches cost $384 each.

Image Technology said it hopes to establish strategic alliances with 3-D software developers that will let users create images specifically for 3-D output.

Image Technology International Inc. of Norcross, Ga., can be reached at (770) 416-8848 or (800) 862-8818; fax (770) 416-8847; ajoel@imagetech3d.com; http://www.imagetech3d.com. □

CAD

From Page 10

chitectural drawings less intimidating to clients.

WildTools 2.0 also offers a new means of selecting and trimming elements. By dragging a Finger tool across them, users can select or manipulate up to 100 objects at a time, the company said.

The WildTools 2.0 plug-in costs $189; upgrades are $89.

For 3-D and CAD on a budget, IMSI recently introduced TurboCAD 3D, a stand-alone 3-D modeler, as part of its new $149 TurboCAD 2D/3D package, which also includes TurboCAD 3.0 and more than 5,000 CAD symbols.

The new modeler uses a four-window interface to display 3-D objects and offers wireframe, opaque and semitransparent object attributes.

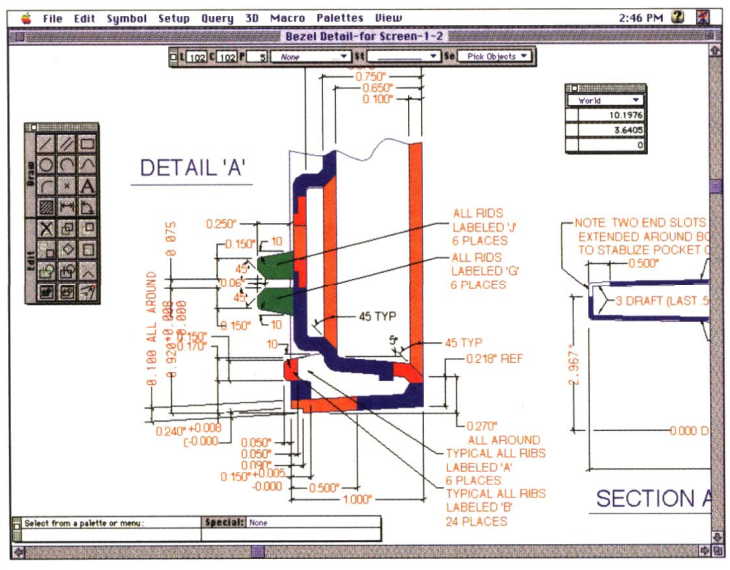
Users can create models in TurboCAD 3D or import 2-D drawings from TurboCAD 2D for extrusion and rendering in three dimensions. Predefined tools guide users in creating elements such as roofs and stairs, and hundreds of 3-D symbols are included, IMSI said.

VCR-style buttons in TurboCAD 3D let users record, edit and play 3-D animations and walk throughs.

On the 2-D side, floating tool palettes in TurboCAD 3.0 offer easier access to tools. A new Coordinates palette lets users enter absolute, relative, polar or 3-D coordinates. Other additions include automatic dimensioning, one-step wall joining, global symbol insert, a new tool bar, and new filters for PICT and DXF Release 12 file formats.

Engineered Software of Greensboro, N.C., can be reached at (910) 299-4843; fax (910) 852-2067; engsw@aol.com; http://www.engsw.com.

International Microcomputer Software Inc. of San Rafael, Calif., is at (415) 257-3000 or (800) 833-8082; fax (415) 257-3565; http://www.imsisoft.com. □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New tool bars and floating palettes augment the 2-D offerings in the TurboCAD 3.0 component of IMSI's new TurboCAD 2D/3D software suite.

Studio preps 10 XTensions

British import Studio Box Ltd. is revving up to ship 10 new QuarkXTensions in four bundles at next month's Seybold San Francisco.

The $295 SBX Publishing package will include six XTensions: Files XT, which will create a list of files associated with an XPress document; Net Document, a module that will track the use of XPress documents over a network; EPS Selection XT, which will create an EPS image of an item or group of items within XPress; Find Fillers XT, an XTension designed to assist in the selection of fillers; Status XT, which will display the status of an XPress document; and FixXT, a module that will automatically fit copy into a text box.

Other XTension packages include SBX Bureau, $110; SBX Integrators, $150; and SBX Editorial, $195. All the XTensions will also be sold individually.

Studio Box Ltd. of Berkshire, England, is at 44-1-73-450-2556; fax 44-1-73-457-3935. □

MediaAssets

From Page 10

sales, customer service and production, it is extremely important to prevent multiple users from modifying the same file at the same time," said William Klocke, vice president of Colorhouse Inc., a pre-press facility in Minneapolis that is beta testing the Mac version of MediaAssets. "It is also critical that the database keeps in sync with the data. The object-oriented nature of MediaAssets allows both of these needs to be met."

MediaAssets 1.5 will also feature a Web client that will let companies give their customers controlled access to image libraries via the Web.

"You can use the MediaAssets Web client to log in as a guest — security-prohibitive — to access information worldwide that was just posted in a remote location," said beta tester Larry Aaron, director of new media at The Coleman Group of New York.

Version 1.5 of MediaAssets will offer expanded support for QuarkXPress, letting users locate images based on where they are placed in a document. The system will preview pages and display lists of fonts, colors and images used on each page.

"Our clients design pages, and we print pages, not single picture elements," Klocke said.

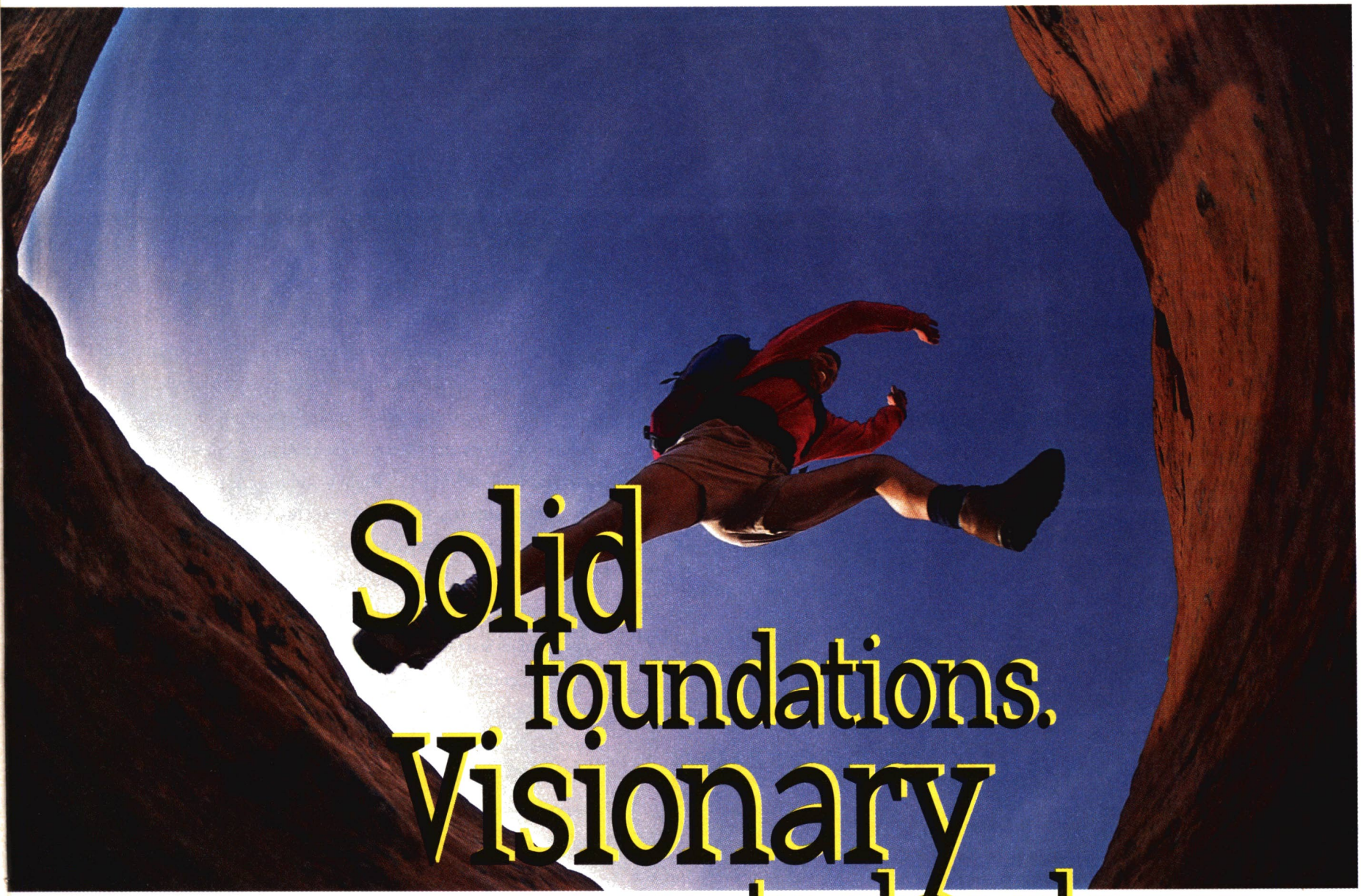
Version 1.5 will also feature automatic archiving controls. The update will let users drag multimedia elements within MediaAssets for archiving and schedule the archiving jobs to run later.

Users will be able to archive earlier versions of a file to free up disk space, the company said. Thumbnail views and associated information for an archived asset will remain online for users to browse and search. The system will track the location and restore an archived asset automatically.

"As a high-end underlying database engine and multimedia tracking and archiving software, the MediaAssets product is an outstanding cross-platform solution," Aaron said.

The Mac package will weigh in against current Mac multimedia database packages such as Cumulus from Canto Inc. of San Francisco (see 07.29.96, Page 8).

MediaWay Inc. of Santa Clara, Calif., can be reached at (408) 748-7400 or (800) 632-7401; fax (408) 748-7402; http://www.mediaway.com. □



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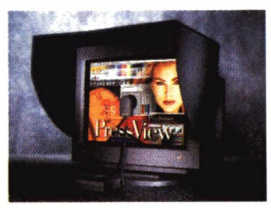
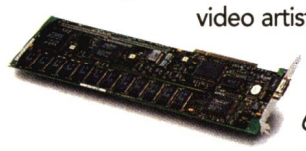
As the pioneer in color publishing solutions, Radius is known for its ability to create innovative products for pre-press, color and digital professionals. That's what has kept us way out in front — now more than ever, with the introduction of ThunderPower.



The ThunderPower 30/1920 PCI graphics card offers blazing performance and the highest screen resolution available on any platform, making it perfect for illustrators, video artists and design professionals. It features 6 MB of video memory and up to 1,920 by 1,080-dpi resolution.



It's the perfect complement to the PressView color reference display system. PressView has the accuracy, resolution and clarity needed for color prepress, media authoring, photography and more. Its high-quality DiamondTron aperture-grille CRT supports resolutions as high as 1,600 by 1,200 pixels.

Together, PressView and ThunderPower are four times faster than any other combination on the market. If you're looking for professional, WYSIWYG color and rock-solid reliability, whether for yourself or for your customers, Radius requires no leap of faith. So call your local retailer or Ingram Micro at 1 (800) 456-8000.

Resellers can earn a free PressView 17-inch monitor (a $1,700 value) by purchasing any five of the nine qualifying bundles of PressView or PrecisionView monitors with ThunderColor or PrecisionColor cards from Ingram Micro now through September 27, 1996. Call your sales representative at 1 (800) 456-8000 for details.*

End users can jump on this deal: Purchase any Radius monitor with a Radius PCI graphics card and receive Fractal Design's Poser, the best way to integrate the human figure into design, and E-magine's ProView, the world's easiest multimedia authoring tool, for free (a $198 value). Just fax proof of purchase to Radius' Better Than Ever Summer Promotion at (714) 566-7812.

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Imagexpo to plug into Web

Soft proofing app to utilize TCP/IP

By Rebecca Gulick

Aiming to ease the burden of proofing, Group Logic Inc. is working on a cross-platform, Internet-savvy update to Imagexpo, the company's software for remote soft proofing, annotation and file transfer.

Imagexpo 1.6, to ship in September for $795, will feature TCP/IP support, enabling users to connect to remote sites via internal company networks or the Internet so they can exchange soft proofs, static bit maps of pages and images.

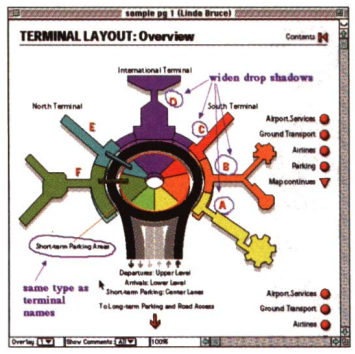
The new TCP/IP support will extend Imagexpo's AppleTalk-based multipoint conferencing capabilities, enabling three or more sites to view and mark the same page or image via the Internet or other TCP/IP network.

Imagexpo 1.6 will also mark the debut of a Windows version that will let users of Intel-standard PCs view and annotate soft proofs as well as participate in interactive conferences and transfer files.

In addition, the new version will feature an address book that stores the names and TCP/IP addresses of remote users.

The software will also offer full compatibility with Adobe Virtual Network, an automated job-delivery application developed by Group Logic and published by Adobe Systems Inc. of Mountain View, Calif.

Upgrades will be free to registered users and available from the company's Web site.



Imagexpo 1.6 will let users connect to remote sites via internal company networks or the Internet to exchange soft proofs of pages or images.

New users will be offered a 30-day trial period.

Group Logic Inc. of Arlington, Va., can be reached at (703) 528-1555 or (800) 476-8781; fax (703) 527-2567; info@grouplogic.com; http://www.grouplogic.com. □

ICE to heat up image processing

By Kelly Ryer

Integrated Computing Engines Inc. this month announced a PCI-based "rendering superstation" for both the Mac OS and Windows NT that the company says is the fastest in the world.

Called GreenICE, the system is aimed at speed-hungry graphics users and is scheduled to ship in November.

According to ICE, the GreenICE system will initially optimize Adobe Photoshop and Adobe After Effects, both 2-D imaging applications from Adobe Systems Inc. of Mountain View, Calif. ICE said it additionally plans to add acceleration for a photorealistic 3-D renderer in early 1997 as well as provide support for Adobe Premiere, a video-editing package.

The company's rendering software will use plug-ins to connect the hardware to the various applications.

ICE General Manager Jonas Lee said: "Instead of choosing an Adobe blur, users will pick an ICE blur. It'll blur at a much faster speed."

Early tests show the GreenICE system will perform certain operations at speeds five to 20 times faster than an unaccelerated Power Mac 9500, Lee said.

Based on the ADSP SHARC chip from Analog Devices Inc., the GreenICE system will use the MeshSP, a 16-processor supercomputing rendering engine originally developed at the Massachusetts Institute of Technology's Lincoln Laboratory.

According to the company, the GreenICE system generates more than 1.6 billion floating-point instructions per second.

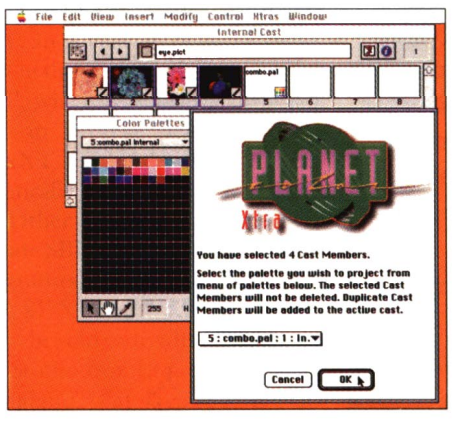
Demonstrated at the Siggraph 96 show in New Orleans earlier this month, the systems are expected to cost less than $15,000.

Integrated Computing Engines Inc. of Waltham, Mass., can be reached at (617) 768-2300 or (800) 792-4233; fax (617) 768-2301; http://www.iced.com. □

LIZARDTECH MANAGES DIRECTOR COLOR

LizardTech recently scaled up its color-management efforts when it released a version of its color-reduction and image-compression software that plugs into Macromedia Director 5.0.

The Planet Color Xtras package, priced at $69, is based on the same MCICR (Monte Carlo Image Compression and Representation) color-reduction technology as the $149 stand-alone version of Planet Color, LizardTech said. Licensed from the Los Alamos (N.M.) National Laboratory, MCICR technology uses a pixel-by-pixel analysis-and-replacement algorithm. The Xtras let users apply customized eight-bit color palettes to one or more Director cast members, LizardTech said. A bundle of the stand-alone Planet Color and Planet Color Xtras is $189. Upgrades from any LizardTech product to the Xtras is $49.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Internal Cast
Color Palettes
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Xtra
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Cancel
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LizardTech of Seattle is at (206) 728-8120; fax (206) 728-8443; info@lizardtech.com; http://www.lizardtech.com.

GRAPHIC DETAILS

- **Human Software ships Medley 3.0 filter**
- **ArchiCAD 5 lets users edit section views**
- **Pitango adds extension to ClickWorks**

The Human Software Co. Inc. of Saratoga, Calif., recently shipped its $149 Medley 3.0 filter for photographic retouching and compositing, building clipping paths, performing color correction, and creating masks and drop shadows. Medley 3.0 is available as a QuarkXTension, a plug-in for Adobe Photoshop, and an Xtra for Adobe Illustrator and Macromedia FreeHand. Phone (408) 399-0057; fax (408) 399-0157. … Right on time for its projected ship date, **Graphisoft U.S. Inc.** of San Francisco has shipped Version 5.0 of ArchiCAD, a $3,795 package that lets users edit section and elevation views and adds an intelligent cursor. Graphisoft is also shipping ArchiSITE, a landscaping and terrain modeler, as well as Version 3.0 of its StairMaker utility. Phone (415) 703-9777 or (800) 344-3468; graphisoft@aol.com; http://www.graphisoft.com. … **Pitango** of Bedford, Mass., a division of Scitex Corp., has added an extension to ClickWorks, its $985 multimedia-authoring tool, which is slated to ship Sept. 16. The WebLink extension allows users to add new information to projects on CD-ROMs or hard disks by dragging elements from a Netscape Navigator browser. During playback, these Web-based elements play back in a predefined window. Phone (617) 275-5150 or (800) 675-5666; fax (617) 275-3430; http://www.scitex.com/pitango. … **NRG Software LLC** of Milwaukee recently shipped Font Fetch 1.3, an update to the XTension for tracking wayward fonts. The $99.95 XTension draws on information from Symantec Corp.'s Suitcase 3.0.1 to search for missing fonts and opens and closes the fonts on the fly; it can also now search for fonts in EPS files. Upgrades are free. **XChange Inc.** of San Francisco, Font Fetch's North American distributor, can be reached at (415) 642-3733 or (800) 788-7557; fax (415) 864-7594; http://www.nrgsoft.com. … **Macromedia Inc.** of San Francisco announced that both the Mac and Windows versions of FreeHand, $599, are now bundled with a free, limited version of MetaTools Inc.'s KPT Vector Effects, a set of effects plug-ins that includes Shadowland, Sketch, Emboss, Warp Frame, Color Tweak and Neon. Phone (415) 252-2000 or (800) 326-2128; http://www.macromedia.com. … **Bitstream Inc.** of Cambridge, Mass., last month announced that it licensed its TrueDoc font portability and compression technology to Macromedia for use in future products. … FlightCheck 2.6, the $399 pre-press verification software from **Markzware Software** of Santa Ana, Calif., added FreeHand 5.5 to its list of supported applications, which also includes XPress, Adobe PageMaker and Illustrator. The utility preflights documents in these applications without opening the applications themselves. Phone (714) 756-5100 or (800) 300-3532; fax (714) 756-5108; info@markzware.com; http://www.markzware.com/. □

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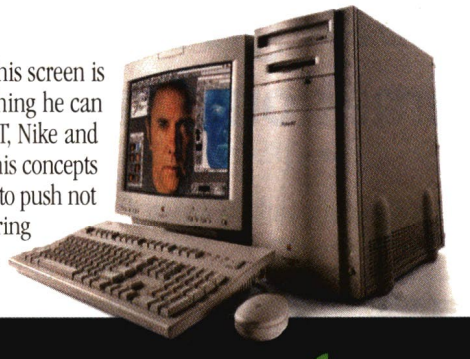

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QuickMail shift angers users

Missing TCP/IP access disappoints

By Joanna Pearlstein

QuickMail administrators are reacting loudly to CE Software Inc.'s recent e-mail strategy shift, and many are disappointed, displeased and confused.

At Macworld Expo, the West Des Moines, Iowa, company said it would migrate its current mail product to Internet protocols. The centerpiece of the strategy change is QuickMail Pro, a new client due this fall that will be based on TCP/IP and Post Office Protocol 3 (POP 3) instead of AppleTalk and CE's proprietary mail protocols (see 08.05.96, Page 24).

The new plan is a departure from CE's previously announced QuickMail road map, which covered the current Version 3.6 and upcoming versions 3.7 and 4.0 (see 07.10.95, Page 1). The company removed the road map from its Web

See CE, Page 20

Net.Jet tool to speed Web connections

Peak Technologies Inc. said it thinks Java can perk up the Web. The company plans to release in October Net.Jet, a Java-based tool to accelerate Web browsing.

Net.Jet will watch and learn how a user browses the Internet and then speed connections by predicting future actions, according to Peak. Benchmarks were not available, but the company said Net.Jet will perform better for users who visit the same Web sites repeatedly than for users who visit different sites every day.

The program will require a Java-enabled Web browser, such as Netscape Navigator. Peak, which also builds multimedia-authoring tools for Java, will sell Net.Jet for $29.95.

Peak Technologies Inc. of Bellingham, Wash., is at (360) 733-6010 or (800) 453-5322; fax (360) 733-7818; info@peak-media.com; http://www.peak-media.com. □

Web database tools get plug-in updates

By David Morgenstern

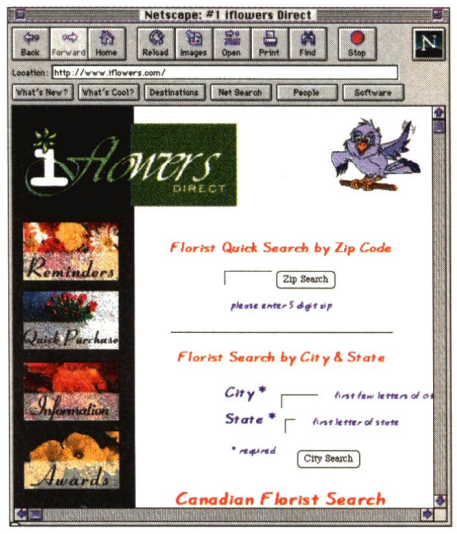
Three Web vendors are prepping new development tools and updates that integrate Mac Web servers with databases.

In addition to CGI (Common Gateway Interface) versions, some of the tools will support Quarterdeck Corp.'s new WebStar API (W*API) plug-in architecture (see 05.20.96, Page 18).

▶ **Web Broadcasting Co.** in September will release WEB FM 3.0, a W*API-compatible version of its tool for Claris FileMaker Pro 3.0. The company said the update may replace the current $195 CGI version.

The forthcoming Power Mac-native plug-in will boost typical server search times from two to three seconds per transaction to two transactions per second, according to the company. The software will also come with the company's WebPage FM, which offers a library of

See Database, Page 20



The WebDBC 2.0 CGI lets Web users connect to ODBC servers via HTML forms, like this one.

Intelligence at Large's MovieStar Version 1.5 can export movies as MIME files, HTML pages or GIF animations for use on the Web.

MovieStar gives fast start to animations on the Web

By Kelly Ryer

As movies and animations proliferate on the Internet, Intelligence at Large Inc. is keeping pace with applications and utilities for creating and managing them.

The company this month released Version 1.5 of its MovieStar multimedia authoring tool. The $149.95 application lets users create Web-oriented multimedia by adding titles, voice-overs and transitions to QuickTime movies. Version 1.5 allows users to create "fast-start" QuickTime movies that play while loading, as well as animations in JPEG or GIF89 format. Users can download a plug-in from the company's Web site for viewing MovieStar files via Netscape Navigator 2.0 and Microsoft Internet Explorer.

Intelligence at Large also released a pair of server plug-ins that work with WebStar 1.3. Accord-

See Movie, Page 20

FOCUS ON

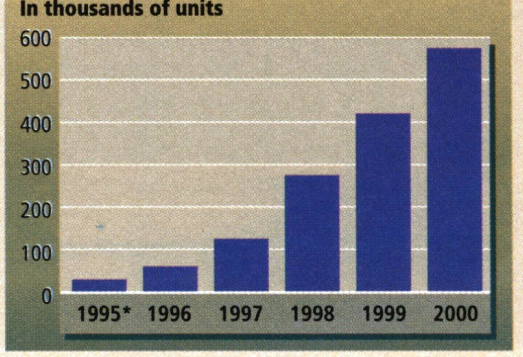
INTEROPERABILITY

ATM now Apple's pet technology

By April Streeter

Convinced that LANs of the future will look to Asynchronous Transfer Mode to get the speeds they need, Apple is promoting the high-speed network technology to application developers.

Projected ATM market growth



**Actual number. Source: Dataquest Inc.*

Last month the company unveiled a seeding program called the ATM Application Jump Start Program and also signed an agreement with ATM adapter vendor Fore Systems Inc. The Warrendale, Pa., company will port Jump Start's API to Unix.

Jump Start, scheduled to be released by the end of this month, will cost developers $7,500. Its key piece is a license to what Apple calls ATM Middleware, an API consisting of a user interface and software to provide compatibility between the Mac OS and ATM's signaling modules, as well as support for ATM's LAN emulation and classical Internet Protocol modes.

Jump Start also includes an ATM switch from Whitetree Inc. of Palo Alto, Calif.; two PCI ATM adapters from Fore; and what Apple calls "limited direct support" from its engineers, who will help users through e-mail and possibly telephone or face-to-face discussions.

See Focus On, Page 20

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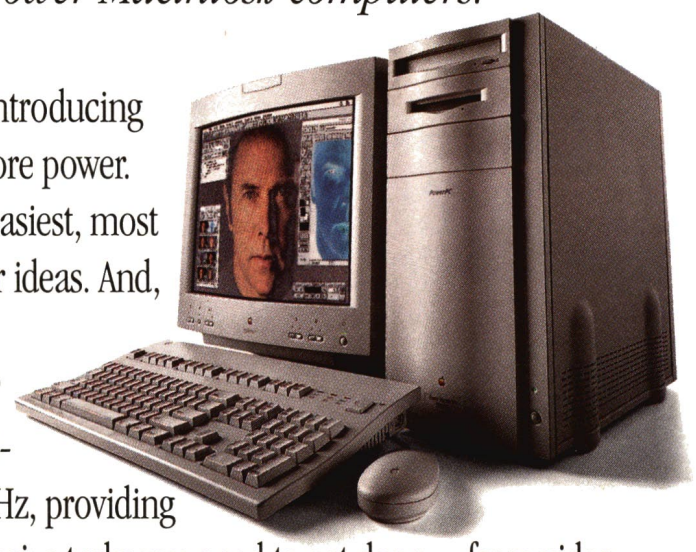

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**Comparison based on MacBench* 3.0 scores appearing in* MacUser, *February 1996 and October 1996. MacBench 3.0 was developed and is maintained by the Ziff-Davis Benchmark Operation. Benchmark tests were performed by MacUser Labs. ©1996 Apple Computer, Inc. All rights reserved. Apple, the Apple logo, Macintosh and Power Macintosh are registered trademarks of Apple Computer, Inc. Power Mac is a trademark of Apple Computer, Inc. PowerPC is a trademark of International Business Machines Corporation, used under license therefrom. MacBench is a registered trademark of the Ziff-Davis Publishing Company.*

FOCUS ON

From Page 18

Fore's Unix version of the ATM API is expected to be ready in early 1997.

Larger data packet sizes and faster signaling technologies allow ATM to deliver speeds from 25 to 155 Mbps to desktops, with speeds of 1 Gbps available to backbones. But so far, speeds of Macs connected to ATM have fallen far below ATM's theoretical maximum performance.

Early versions of Open Transport coupled with the lack of Open Transport-compatible applications were among the Mac's bottlenecks in ATM settings. Ongoing improvements to Open Transport, along with developers' compliance with the ATM API, are central to ATM's appeal for Mac-based LANs.

> **"Over and over again the ATM hardware vendors blamed the OS vendors, who blamed the applications. Our customers don't have time to deal with that."**
>
> ***— Alan Brown, Cinebase***

David Singer, engineering manager in Apple's communications products division, said that in recent Apple benchmarks the Mac easily took advantage of the available bandwidth in a 25 Mbps ATM environment.

"We want [users] to go beyond seeing ATM as just an interesting plaything," Singer said. "With the API we deliver a consistent interface and help to establish ATM as something safe to deploy."

The ATM API will arrive not a moment too soon for systems integrator Alan Brown of Cinebase Software Inc. of Los Angeles. Brown, who designs networks and software for customers such as Warner Bros., said that in environments in which 3-D animations and full-motion video are produced on both Macs and Silicon Graphics machines, ATM's guaranteed bandwidth and greater speeds are required for the Macs to remain viable.

"We've been pounding the ATM drum for a while," Brown said, referring to his efforts to convince Apple and Fore that the API was needed. "When you are running serious video files back and forth between SGIs and Macs, with Ethernet you just watch the stopwatch run for hours."

Fast Ethernet wasn't significantly better, Brown said, and ATM has been inadequate at the desktop. "Over and over again the ATM hardware vendors blamed the OS vendors, who blamed the applications. Our customers don't have time to deal with that."

Brown has an extensive ATM network at Cinebase headquarters and is eagerly waiting to connect his Macs. He said he would be happy with just a fraction of 25 Mbps.

"We are pushing for a guaranteed 4 to 5 Mbps, which is our vanilla requirement — the minimum we'd need for Macs to achieve parity with SGIs," he said. "And it is an order of magnitude better than what the Macs are able to achieve now. I think we can get it." □

Open Door tools tighten Web sites

By Joanna Pearlstein

Open Door Networks Inc. this month rolled out two tools for managing Web sites.

▶ **LogDoor 1.0** is a $179 multisite log-processor program that helps administrators analyze, manage and distribute data about their Web servers.

The application produces log files and summary reports in real time for each top-level site hosted on a Web server.

Webmasters can configure LogDoor to automatically distribute those files and reports over the Web.

Log files are compatible with log formats for Quarterdeck Corp.'s WebStar and can be fed into WebStar-compatible log post-processors for further analysis, the company said.

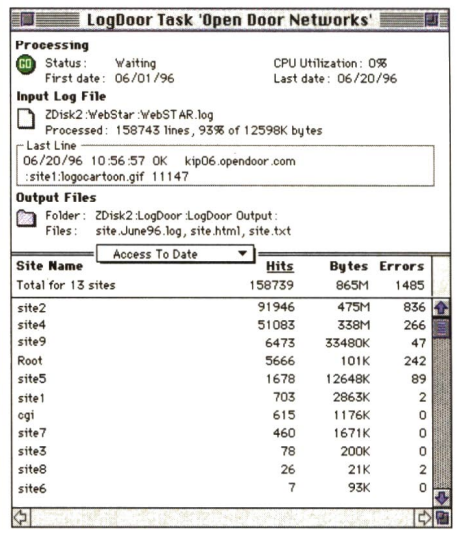
▶ **Home Door 1.2** is a $399 multihoming tool that allows users to host multiple domains on the same Web server. The HomeDoor extension enables a Mac Web server to redirect requests for top-level home pages to a subdirectory.

For example, HomeDoor can respond to a request for "www.company2.com" with information from a different directory, such as "www.company1.com/company2.html."

HomeDoor prevents users from seeing the site's real URL, thus creating an illusion of multiple sites on one server, Open Door said.

The HomeDoor 1.2 update adds a log file, the capability to make changes without restarting the server and support for discontiguous TCP/IP addresses.

Open Door Networks Inc. of Ashland, Ore., can be reached at (541) 488-4127; fax (541) 488-1708; logdoor@opendoor.com or homedoor@opendoor.com; http://www.opendoor.com. □



Open Door Networks' LogDoor 1.0 tracks information about multiple Web sites and can distribute reports over the Web.

Movie

From Page 18

ing to the company, the plug-ins configure themselves automatically as user-defined Actions when placed in a special WebStar folder.

For Webmasters who need to display live video, the HomeView plug-in connects video sources to a WebStar server. The video can be viewed via any browser that supports the MIME (Multipurpose Internet Mail Extensions) format, including Internet Explorer and Navigator 2.0 and 3.0.

The AutoStreamer plug-in lets a WebStar server show fast-start QuickTime movies without altering the Web site or converting the movie files. AutoStreamer works with all older QuickTime viewers, the company said.

A single-user license for the plug-ins costs $99 each or $149 for both; a site license for both plug-ins is $199. Free demo versions are available on the company's Web site.

Intelligence at Large Inc. of Philadelphia is at (215) 387-6002 or (800) 425-7638; fax (215) 387-9215; info@beingthere.com; http://www.ialsoft.com. □

Database

From Page 18

database objects for Web authors.

Web Broadcasting has not finalized pricing for the update.

▶ **EveryWare Development Corp.** plans to ship a free W*API-compatible update for its Tango Application Server 1.5 software by the end of the month.

The plug-in, as well as the previous CGI, will be included with Version 2.0 of its $349 Tango for FileMaker as well as Tango Enterprise, which has license fees from $995 to $2,295. Also due by September, Version 2.0 will support Data Access Manager, SQL and Open Database Connectivity (ODBC) databases, EveryWare said.

▶ **Nomad Development Corp.** this month released a Mac version of its WebDBC 2.0 ODBC tool. The $595 cross-platform CGI is also available for Windows NT and 95 and Sun Solaris platforms (see 11.27.95, Page 24).

According to Nomad, the Web tool provides many security features found in traditional client-server applications. Managers can assign security to each database, table or operation.

The company said it expects to offer a W*API version by the end of the year.

Web Broadcasting Co. of Palo Alto, Calif., can be reached at (415) 329-9676; fax (415) 323-5418; info@macweb.com; http://macweb.com/webfm/.

EveryWare Development Corp. of Mississauga, Ontario, can be reached at (905) 819-1173; fax (905) 819-1172; info@everyware.com; http://www.everyware.com.

Nomad Development Corp. of Seattle can be reached at (206) 812-0177; fax (206) 812-0170; info@ndev.com; http://www.ndev.com. □

CE

From Page 18

site this month and has not disclosed plans for the current product, now called QuickMail LAN.

Rich Rose, technology manager at New York-based MJM Creative Services, said he is confused about the direction of QuickMail LAN. "I went to Macworld hoping to see 3.7 or 4.0, and instead, out of nowhere, there's QuickMail Pro. Now the road map is gone from CE's Web site, and I have no information from CE about the future of my server."

Jessica Dunker, CE director of marketing, said, "Our commitment to the LAN product is absolute," but the company has a "wait-and-see strategy" for the server. Dunker said the product's future will depend in part on customers. In any case, CE will no longer spell out its product plans publicly, she said. "You won't see another road map from us because it doesn't give us enough leeway about future products."

While many users applauded the adoption of Internet standards, many were also displeased about the plan for a POP client with no CE-created POP server.

"I'm reluctant to try QuickMail Pro for two reasons," said David Gutierrez, a programmer at the University of Texas Anderson Cancer Center in Houston. "First, I no longer trust CE's promises regarding future features of their products. Second, I was one of the suckers who bought QuickMail AOCE, their PowerTalk client. It was garbage. Why should I believe that their first try at a POP client will be any better?"

Managers of cross-platform sites are particularly concerned because TCP/IP access to existing LAN servers from Macs and Intel-standard PCs is still up in the air. This capability had been promised for QuickMail 4.0, and CE recently said that TCP/IP access will definitely not be added in 1996.

"CE's dropping of TCP/IP support in QuickMail LAN raises questions about what other portions of the road map will be changed," said Elliot Wilen, operations manager at MPR Associates Inc. of Berkeley, Calif. Wilen said he understood CE's move to Internet standards, but he was unhappy because he purchased a 60-user QuickMail upgrade subscription based on the now-canceled road map.

Dunker said CE will deal on a case-by-case basis with users who purchased the upgrade plan. "If this [new strategy] is not right for them, then we'll have to refund their money. That may mean we lose some users, and we're sorry about that." □

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TripleSoft CGI eyes server

By Joanna Pearlstein

TripleSoft Inc. in September plans to release ScreenView, a new CGI that will let Webmasters keep an eye on remote servers.

ScreenView is a CGI script that will let users view the status of a Web, FTP or mail server. After receiving a message, the CGI, or Common Gateway Interface, will run the script, take a screen shot of the server and display the resulting image in JPEG format on a Web page, TripleSoft said.

Users will be able to select the size and quality of the image returned. ScreenView will launch in the background so that the screen shot doesn't include the product itself. TripleSoft said managers should secure portions of servers to prevent against unauthorized access.

The company recently offered users a beta version; the final release will cost $15.

TripleSoft Inc. of Raleigh, N.C., can be reached at phone and fax (919) 872-0916; info@triplesoft.com; http://www.triplesoft.com. □

ParaGraph to add dimension to Web pages

By Rebecca Gulick

ParaGraph International Inc. recently announced a Mac version of its tool for creating 3-D environments for the Web.

Virtual Home Space Builder 2.0, scheduled to ship in November for $49.95, will support the recently ratified Virtual Reality Modeling Language (VRML) 2.0 standard for publishing 3-D virtual-reality sites on the Web.

VRML 2.0, which was unveiled this month at New Orleans' Siggraph 96, adds support for multimedia elements and behaviors.

Virtual Home Space Builder 2.0 for Mac will let users create 3-D scenes containing images, sounds, textures and movies. The authoring tool will provide point-and-click tools for designing 3-D spaces and let users import more-sophisticated elements from other applications.

Web users will be able to view the multimedia 3-D Web spaces via browsers that support VRML 2.0, such as Netscape Navigator 3.0.

Virtual Home Space Builder 2.0 will support a variety of image formats, including JPEG, GIF, PICT, BMP and EPS.

It will also support .WAV, RealAudio and MIDI sound formats, and animations with sequences of image files. It does not support QuickTime video, however.

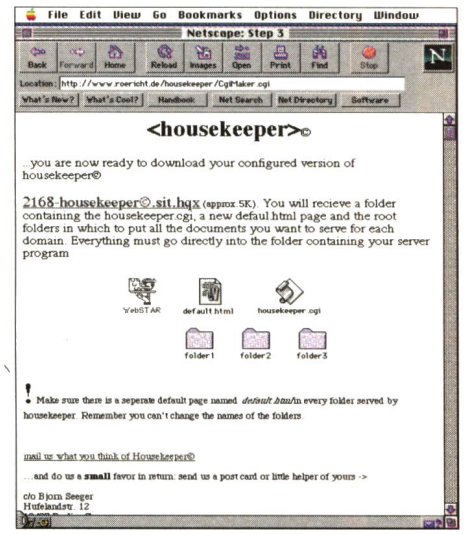
ParaGraph International Inc. of Campbell, Calif., can be reached at (408) 364-7700 or (800) 810-0055; fax (408) 374-5466; http://www.paragraph.com. □

Housekeeper masters multiple domain names

Mac IS managers seeking to serve multiple domain names from one Macintosh can now look to The Flying Boat Corp., which is shipping Housekeeper 1.2.

The free product can serve up to 99 domains when used in conjunction with Apple's MacDNS domain name server and a Mac-based Web server.

To use Housekeeper, users go to the Web site and enter the number of domains they want to serve and the names and locations of those domains. The product asks users a series of questions and then creates a customized script for them, which users can then download to serve multiple domain names. Users need to register those domain names and point the domains to the Mac server's Internet Protocol address. The product requires AppleScript.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housekeeper.cgi
folder1
folder2
folder3
Make sure there is a seperate default page named default.html in every folder served by housekeeper. Remember you can't change the names of the folders
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At the Housekeeper Web site, when users enter the number of domains they wish to host, a Common Gateway Interface will be created.

The Flying Boat Corp. of Berlin can be reached at housekeeper@roericht.de; http://www.roericht.de/housekeeper. □

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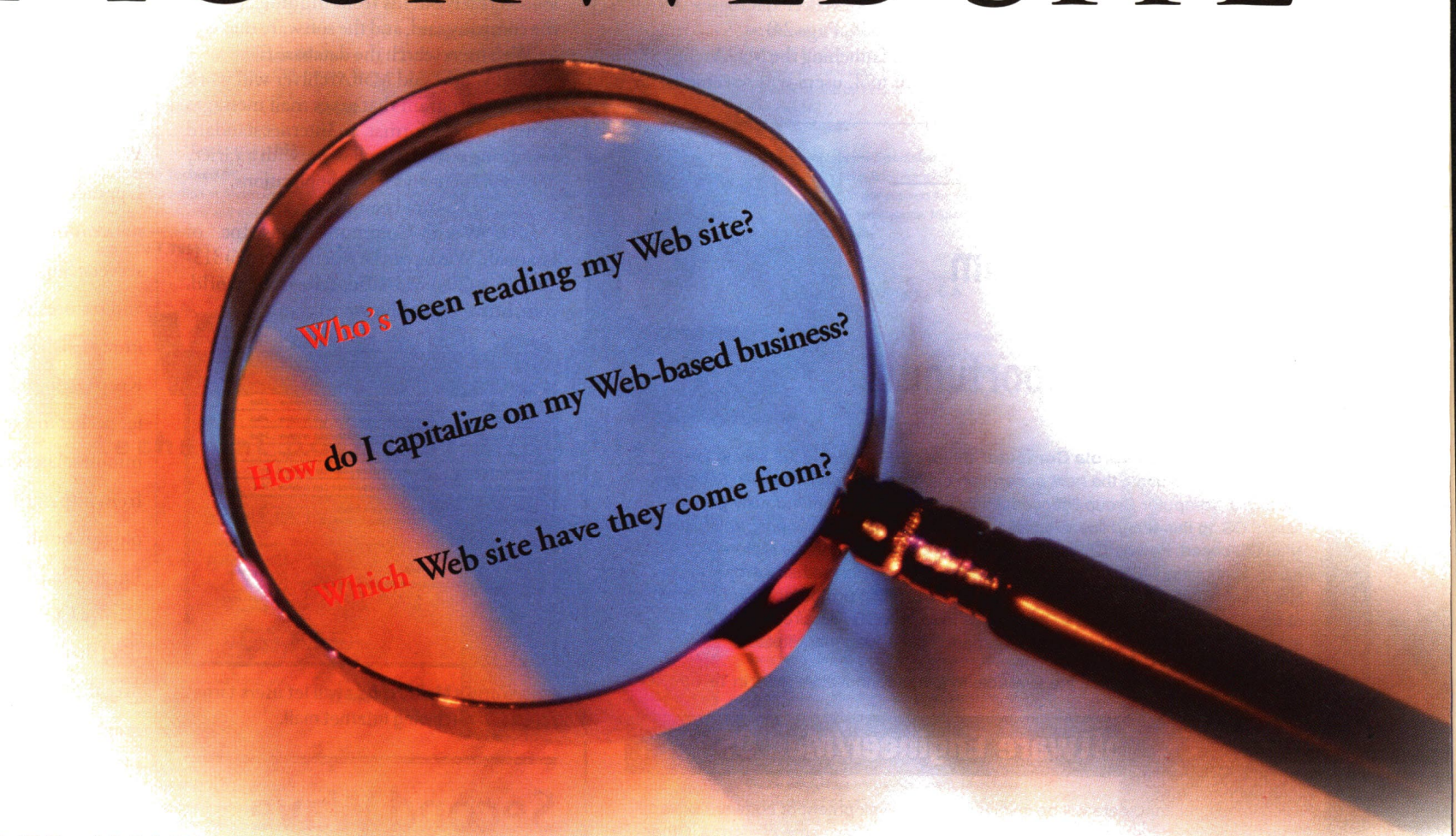

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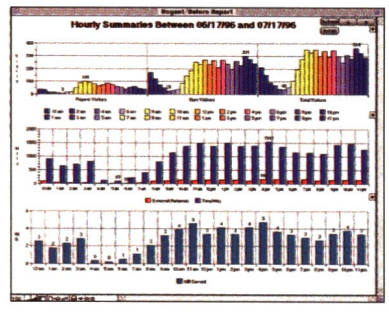
More importantly, Bolero isn't just about logging. It also captures information in real-time and stores the data in its own industry-standard SQL database so you can begin manipulating data and analyzing trends immediately. Or, if you prefer, you can optionally use Bolero with your Oracle database.

Bolero goes beyond the basics to include the advanced features you need to maintain your competitive edge:

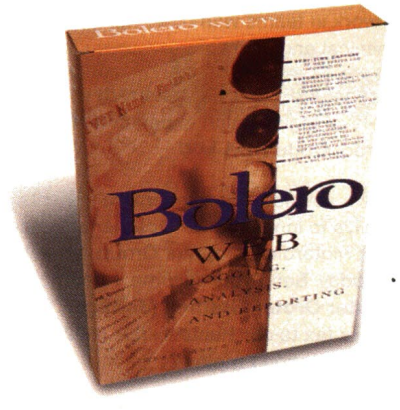
- Automatic generation of hourly, daily, weekly and monthly summaries
- Ability to perform aggregate summaries of any time period so that you can analyze your trends over an extended period of time
- Built-in Domain Name resolution that takes the load off your Web server
- Ability to log multiple Web servers simultaneously, allowing you to compare the activity and performance of all your Web servers
- Includes versatile report generation tools—Voyant and CLEAR:Access



In addition, Bolero provides numerous pre-defined reports and graphs so you can begin analyzing your Web activities immediately. Plus, Bolero's open SQL database gives you the ability to generate customized reports, with unlimited reporting options.

The bottom line? Bolero lets you stay on top of Web site activities—providing the right information at the right time, so you can make informed decisions.

For an even closer look at Bolero, call us or visit our Web site today!



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Blue World aims to tame Internet e-mail

By Joanna Pearlstein

Hoping to help users control their e-mail, Blue World Communications Inc. is preparing MailArchiver, its Internet mail utility.

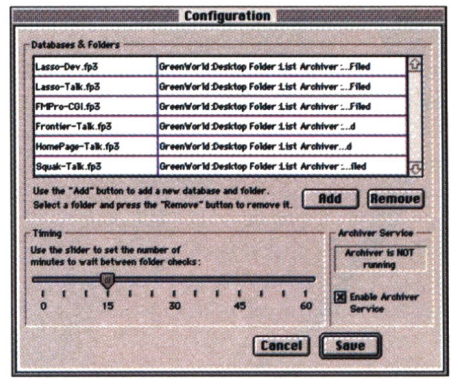
Due in September, the software will automatically archive e-mail messages in a Claris FileMaker Pro database. Aimed at list-service management, it will work in conjunction with Lasso Lite, Blue World's free CGI (Common Gateway Interface) that ties FileMaker databases to the Web (see 08.19.96, Page 24).

After launching the MailArchiver configuration tool, users will select a folder with contents to be archived. Then, users will select the destination database file and set a schedule for archiving. The database will be able to receive items from multiple folders, the company said, and the software duo will let Web users search the database file.

Blue World said MailArchiver will work with any program that saves mail messages in the RFC 822 format, an Internet standard for storing e-mail. It will work with a variety of e-mail client and server applications.

Pricing has not been set.

Blue World Communications Inc. of Issaquah, Wash., can be reached at (206) 313-1051; fax (206) 313-1056; sales@blueworld.com; http://www.blueworld.com. □



Blue World's MailArchiver will let users target folders for archiving Internet mail.

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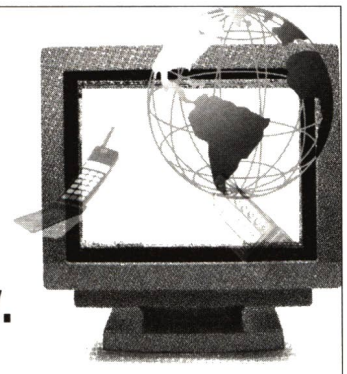

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Sr. Hardware Designer/Apple Systems

The successful candidate will be involved in hardware design engineering for PowerPC-based Apple systems. Other responsibilities include logic design and simulation of digital computer systems, and writing/editing of design specifications. Must work in teams with other hardware designers, and software, test, and mechanical engineers.

Requires a BSEE (MSEE preferred) with five to eight years of experience including board-level logic design experience. PCI or PowerPC bus architecture experience preferred. **Code HDA-MW**

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Second Wave preps PCI cards

By Joanna Pearlstein

Consumers seeking to add a host of modems to their BBSes or remote-access servers can soon turn to Second Wave Inc., which is prepping a family of multimodem PCI cards.

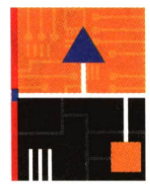
Due to ship in September, the CommBlaster cards will be available in configurations of two, four, six and eight fax modems running at 14.4 or 28.8 Kbps. Users will be able to plug phone lines into the CommBlaster's RJ-11 jacks and install multiple CommBlaster cards in the same machine. Each modem on the card will have a set of troubleshooting LED lights for viewing the modem's status.

With several modems on one card, Second Wave said, the product will eliminate the need to add more serial ports to systems. Second Wave also said that because the cards will bypass a machine's serial port, the modems will be able to achieve higher transmission speeds.

CommBlaster cards with two, four, six and eight 14.4-Kbps modems will cost $395, $695, $995 and $1,295, respectively. CommBlasters with two, four, six and eight 28.8-Kbps modems will cost $995, $1,495, $1,995 and $2,495, respectively.

Second Wave Inc. of Austin, Texas, can be reached at (512) 329-9283; fax (512) 329-9299; secdwave@flash.net. □

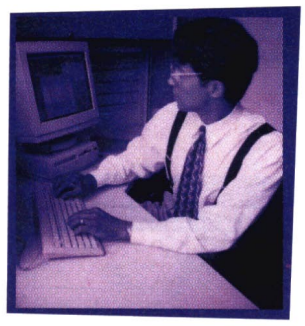
NETWORK TRAFFIC



- **WebStar freebies**
- **Web HyperCard**
- **COPSTalk bundle**

Quarterdeck Corp. of Marina del Rey, Calif., this month released a slew of free WebStar add-ons. The utilities include Upgrade Notifier, which displays update notices downloaded from the company's servers; Super Settings, which backs up and restores WebStar configurations and improves the suffix mapping feature; and Keep Connection Up, which sends a tickler packet to a remote server every two minutes. Users can download the add-ons from http://eric.starnine.com/webstar/plugins.html. … **Heizer Software** of Largo, Fla., this month released LiveCard, a CGI (Common Gateway Interface) that lets users run HyperCard stacks over the Web. LiveCard publishes a graphical image of the stack and creates HTML forms for its interactive elements. Normally $149.95, LiveCard is $99.95 until Sept. 10. … **Apple** and **COPS Inc.** in July signed a deal to bundle the $159.95 COPSTalk 2.0 with AppleShare. The client software for Windows 95 provides Mac server and AppleTalk printer access from Intel-standard PCs. COPS of Norcross, Ga., said it will ship a Windows NT version by year-end. … **Maxum Development Corp.** of Streamwood, Ill., this month announced TagBuilder, a utility for adding Maxum's custom HTML tags to Web pages built with PageMill 2.0 from Adobe Systems Inc. of Mountain View, Calif. Scheduled to be bundled with the upcoming PageMill upgrade, TagBuilder presents tags as graphical elements that can be dragged onto pages, allowing easier links to Maxum's NetCloak and NetForms CGIs. … **Scott Kleper** this month updated HTML Markup to Version 2.2, adding AppleScript hooks to the text-to-HTML batch processor. It is available at http://www.printerport.com/klephacks/markup/about.html. □

MacTemps has job openings all over the country. Here are just a few:



Atlanta, GA

Network Administrator
Set up 6 Macs on an existing token ring network, connecting all to a stand alone PC. Short-term assignment for this insurance firm near Perimeter Mall.
Job # ATL 7018 **$20/hour**

Computer Media Coordinator
Roll out PowerPoint presentations on laptops for sales reps. Director experience needed too. Some design involved for this check printing firm in Decatur.
Job # ATL 7028 **$30-40K/year**

Cleveland, OH

Multimedia Artist
Seeking high tech Web developer. Experience required: Director, Shockwave, CGI, Access, C++ and Java.
Job # CLE 1008 **$35K/year**

Detroit, MI

Macintosh Technician
Temporary position at Metro Detroit advertising agency. Installations and troubleshooting of hardware and software.
Job # DET 78657 **$18-22/hour**

Philadelphia, PA

Programmer
High level permanent development position. Need 3+ years experience using C, C++, and Pascal, a networking background and exposure to Code Warrior. Network experience should include AppleShare & TCP/IP protocols and Open Transport in a client/server environment.
Job # PHI 5665 **$60K+/year**

Database Programmers
PowerBuilder gurus needed for permanent opportunities. 2+ years programming and database design & maintenance experience a must. DE Valley area.
Job # PHI 6152 **$50K+/year**

Programmer
Heavy development experience in a C/UNIX environment needed. 2+ years hands-on experience required for this permanent opportunity in DE Valley.
Job # PHI 6154 **$50K+/year**

Database Programmer
PC relational development using Visual Basic. 2+ years experience needed for this DE Valley permanent opportunity.
Job # PHI 6153 **$50K+/year**

San Francisco, CA

Programmer
Work for an East Bay developer. 2-3 years corporate experience writing Mac applications in C/C++ needed. Work with Script Manager, TextEdit, WorldScript, and File Manager. Knowledge of Windows API and/or the Mac Toolbox a must.
Job # SF 48245 **$30/hour**

MIS Assistant
For an East Bay pharmaceutical company. Installation, troubleshooting, inventory, & training. Knowledge of Mac OS, Ethernet, AppleShare and MS Office needed. Any experience with Windows or Novell NetWare a plus.
Job # SF 48266 **$25/hour**

PC Technical Support
For small SF consulting firm. Troubleshooting primarily at client sites. Must have good customer service skills and be familiar with Windows 95 and Windows NT.
Job # SF 48269 **$28K/year**

Associate Systems Specialist
For South SF biotech firm. Frontline technical support. Cross-platform support for system software and business applications. Must have excellent customer service skills.
Job # SF 57983 **$17-20/hour**

Seattle, WA

Technical Editors
Edit a multimedia project. Must have strong computer literacy.
Job # SEA 78713 **$15-20/hour**

Programmer/Network Analyst
Visual Basic developers and server specialist needed for a large Internet project.
Job # SEA 57725 **$20-30/hour**

Technical Writer
Writer/editor for documentation of major software agent services. Must have a successful product-shipping record.
Job # SEA 57723 **$25-30/hour**

Technical Editor
Physical Science and Life Science editors needed for a multimedia project. Must have a science background and proven experience.
Job# SEA 58134 **$15-17/hour**

Help Wanted

technical positions available

Boston, MA

Programmer/ Technical Lead
Seeking expertise with C, C++, Java, and VRML. Software development experience required. This permanent position is part of a team creating an Internet browser based on HotJava for the UNIX platform. Create a virtual classroom. Spend a year in Stockholm, then return to this client's brand new location near the Science Museum in Boston.
Job # BOS 58149 **$60-120K/year**

FoxPro Developer
Experienced software engineer sought with expertise in FoxPro for a permanent development position at an international firm's Boston location. Experience developing client-server applications a must.
Job # BOS 58149a **$40-50K/year**

PC Tech Support Specialists
Applicants sought with PC hardware & Windows 95 software expertise for end-user support positions. Applicants should have a broad range of software skills (MS Office, etc.). In-depth troubleshooting skills needed. Communications skills are crucial. Must have hands-on experience installing hardware, network devices and other peripherals. Connectivity knowledge is essential, including TCP/IP, modems, settings, remote access (dial in/out), and related software. Possible temp-to-perm positions.
Job # BOS 63393 **$18-30/hour**

Chicago, IL

Network Engineer
Great opportunity to work for a fast growing Internet consulting company! Opportunity is to help Fortune 1000 companies get online. Novell and NT/Server experience is a must, as well as extensive network evaluation and administration.
Job # CHI 10835 **$45-55K/year**

Programmer
Work in Pascal or C and Code Warrior for Macintosh. Seeking a creative problem-solver who can work quickly and efficiently.
Job # CHI 78615 **$35-50K+/year**

Los Angeles, CA

Network Tech and Consultant
Person who can make appropriate recommendations on upgrading existing systems, from 10baseT to 100baseT, and add new PCs and Macs to the network. Person must also know prepress and printing press machines (Lino, etc.).
Job # LA MS7000 **$25/hour**

Tech Support
Supporting 180 users (120 Macs, 60 PCs). Must have thorough knowledge of Mac OS (7.5.3 update #2), PCI PowerMac 7600s, and DOS/Windows OS. Troubleshoot system set-ups, reconfigure and troubleshoot networking problems (Ethernet/AppleTalk). Light Novell and strong MS Office package knowledge needed.
Job # LA 6563 **$20-22/hour**

Miami, FL

Database Programmers
Programmers wanted to develop 4D front-end links for Mac client machines and Oracle back-ends for UNIX server environments.
Job # MIA 1193 **$40-60/hour**

New York, NY

Help Desk
Hip, nationally-known cable/communications company needs temporary help desk personnel with cross-platform OS skills (Windows 95, Windows 3.1, Mac OS), light Novell and MS Office support ability.
Job # NY 25101 **$23/hour**

Help Desk
Corporate client needs temporary help desk support for online group. FTP, HTTP, Gopher, et al, to help researchers find data for Internet service.
Job # NY 25115 **$25/hour**

Minneapolis, MN

Sr. Network Administrator
Large printing company needs two Mac network administrators. Support end users on-site and over phone with h/w, s/w, & printing issues. Need knowledge of troubleshooting issues related to printing and prepress: stripping, layout, imposition and imagesetters. Network protocol experience also required.
Job # MN 5804 **$35-45K/year**

Help Desk
Large communications company needs a Windows 95 troubleshooter. Must know and understand compatibility issues with Windows 95 and s/w, printing problems. Work in large IS department as the primary Windows 95 user issues contact.
Job # MN 5805 **$17-20/hour**

Philadelphia, PA (cont.)

Mac/UNIX Technician
Work in an electronic prepress department. Knowledge of UNIX servers and C++ needed. Helios a plus. ISDN and other high speed transfer protocols knowledge a must. Support QuarkXPress, Illustrator and Photoshop. Permanent opportunity in Delaware County Area.
Job # PHI 5712 **$35-40K/year**

Computer Circulation Manager
Seeking experienced individual with creativity, vision & drive to manage Mac, IBM, and Novell prepress systems. Analyze current systems, recommend upgrades in equipment and software. Permanent opportunity in the Montgomery County area.
Job # PHI 5971 **$24-40K/year**

PC LAN Administrator
Seeking MS Access experience. Maintain, update and troubleshoot multiple databases. Troubleshoot a Windows 95 LAN with Sybase SQL server. TCP/IP proficiency needed. Temp to perm opportunity in Western Montgomery County.
Job # PHI 6077 **$40K+/year**

Interactive Designer/Illustrator
Looking for a graphic artist/illustrator with Web design skills. Work on-site using Illustrator and Photoshop. Animation experience a plus. HTML experience preferred and knowledge of file formats (GIS, GIF, bitmaps) especially those best for faster downloading. Temp to perm opportunity in the Chester County area.
Job # PHI 6133 **$25+/hour**

Phoenix, AZ

System Integration/Network Support
Macintosh value-added reseller in Phoenix needs networking guru with AIX, Windows NT and some Novell experience. Scripting or database development a plus. Sales support, problem solving, system design and maintenance.
Job # PHOE 1194 **$35-60K/year**

San Diego, CA

Network Manager
Mac computer systems specialist with extensive experience setting up and maintaining networks needed. Ethernet & Appletalk protocols required. Windows NT and PC connectivity experience a plus. Must be able to troubleshoot problems for up to 60 users.
Job # SD 4430 **$40-45K/year**

Technical Support Specialist
Two full-time opportunities available. Positions require 5 years experience providing support via telephone, e-mail and fax. Strong Mac OS, software, & Internet protocols experience all a must. Windows, UNIX and X Windows required. B.S. in Computer Science or equivalent degree preferred.
Job # SD 4413 **$40-45K/year**

Lingo Programmer
Long-term project open immediately for a Lingo programmer. Work for a software developer in North County. Minimum of 1 year corporate experience required.
Job # SD 4405 **$18-20/hour**

Technical Support
Phone support for mostly Mac users. Must have knowledge of edutainment and game software. Must be able to diagnose extension and other problems via phone. PC experience a plus.Strong customer service and communication skills a must. This entry-level position has opportunity for growth. Travel 2-3 times a year to trade shows.
Job # SD 4431 **$25K/year**

Silicon Valley, CA

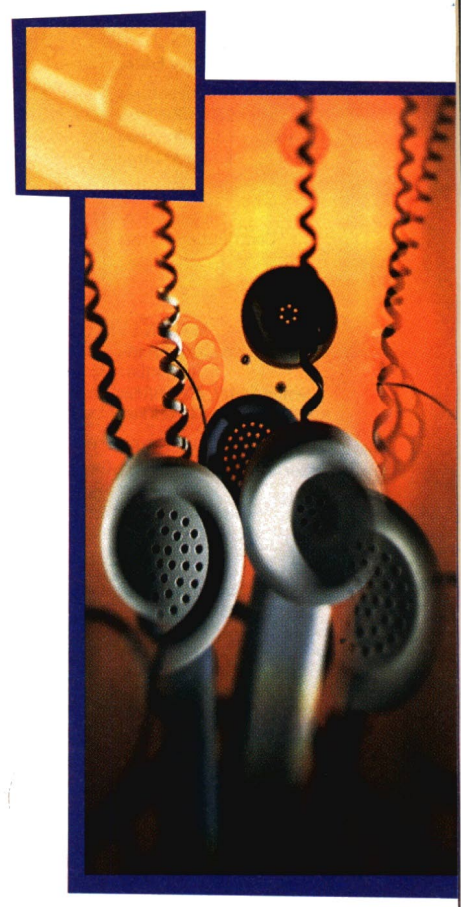
Database Developer
An event planning firm in San Mateo needs a Filemaker Pro developer. Duties include designing & developing the database, communicating with end-users for feedback, and reporting back to the director. Project oriented assignment.
Job # SC 57997 **$16-18/hour**

Macintosh Technician
A Santa Clara electronics firm needs a Mac specialist. Duties include installation of Mac h/w & s/w, troubleshooting both in-house & for their customers around the Bay Area. Windows and UNIX knowledge a plus.
Job # SC 41482 **$16-18/hour**

Macintosh Specialist
A digital entertainment firm in Mt. View is looking for candidates with Mac, Windows NT, Sun, & UNIX experience. Duties include troubleshooting, video manipulation, and HTML & CGI scripting.
Job # SC 40967 **$40K/year**

St. Louis, MO

Macintosh Systems Support Specialist
Must have extensive knowledge of the Mac OS and 2-5 years experience supporting business users in networked environments. DOS and Windows 3.1 experience required.
Job # STL 56 **$30-40K/year**



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BPA INTERNATIONAL

Increments of success

While Apple was causing a flurry at Macworld Expo by announcing its incremental Mac OS update strategy, the company was — without apparent irony — also at Siggraph 96 delivering major upgrades to QuickTime and QuickDraw 3D. A week later, Apple released a beta update that added long-awaited features to Open Transport. These technologies have been successful precisely because they follow the controversial plan Apple is now advocating for the entire OS.

Given a choice, developers prefer system-level services that are updated frequently. They also want the APIs to remain as static as possible so they can reap the benefits of new features and bug fixes automatically. When surveying the winners and losers in Apple's OS past, the pattern of success emerges quite clearly in favor of technologies that fulfill both desires.

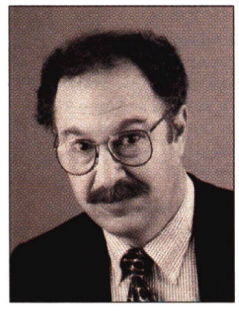
Users, on the other hand, view OS updates more darkly. Often they install each revision reflexively, not knowing if it solves any of their particular problems. That approach will have to stop; it is simply a waste of time in a world of quarterly releases. But as long as the OS increments add important features and fix real bugs, users will embrace frequent updates.

The secret to winning over update-shy users is atomized feature sets and upgrades that don't put a whole machine's stability at risk. Today, users and developers upgrade QuickTime and Open Transport without much concern for the effect on the rest of the OS. That's because QuickTime and Open Transport are discrete sets of code that are easily replaced or restored; they should be the models for all system-level components.

We recall that Open Transport was no picnic at the start, but it's a year later and Apple has cleaned up after itself. The networking overhaul is an instructive example, to be sure. But when the alternative to lots of updates is no forward movement at all — which is what we've gotten for the file manager, user interface and many other areas of the OS — we think the Mac community will prefer an imperfect vitality. □

THE SECOND DECADE HENRY NORR

Poll reveals gap between Apple plan, user concerns



As Apple's senior execs and operating system architects scramble to fill the many apparent gaps in their latest OS strategy, I hope they'll take a moment to flip to Page 32 of the October MacUser or point their browsers to http://www.zdnet.com/macuser/poll.html, then scroll down to the results of the Mac OS 8 question.

There they'll find a breakdown of responses from more than 6,000 Net-savvy Mac users to the question, "Which feature of Mac OS 8 would you most like to see brought to Harmony, Apple's next System 7 release?"

That wording has a certain irony, not to say pathos, since we now know that Apple doesn't plan to incorporate *any* Mac OS 8-specific technologies into Harmony. But I think the results carry a message Apple should be weighing carefully as it looks ahead to subsequent releases.

The poll asked users to choose only one of four options: new Finder features, integrated Internet, true multitasking and improved stability. Internet integration will make the Harmony release, in a sense — Cyberdog will become standard equipment — but only 9 percent of the respondents gave this option top priority. New Finder features, now tentatively scheduled for July 1997, were selected by only 8 percent.

Listen to the customers

The vast majority of votes went to true multitasking (27 percent) and improved stability (56 percent). Unfortunately, Mac OS 8, as it has been described thus far, doesn't really provide "true" multitasking: Various system tasks and background processes will be pre-emptively scheduled, but among applications that use the Macintosh Toolbox — in other words, any application with a user interface — the new OS will still rely on cooperative scheduling, the same serviceable but imperfect mechanism the Mac has depended on since MultiFinder was added to System 6 in 1987.

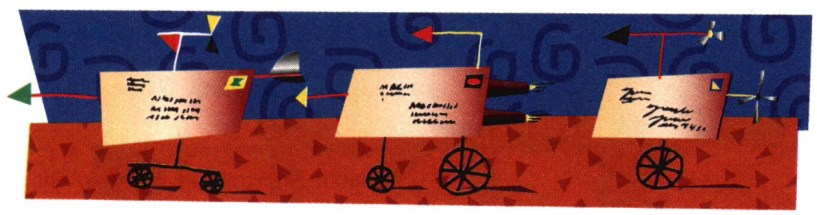
As for improved stability, we can hope that the 1997 releases will resolve more bugs and incompatibilities than they'll introduce. But a qualitative increase in the reliability of the Mac platform, like true multitasking, requires low-level architectural changes that under the new time line won't be implemented until 1998 at the earliest.

Time for a hard look

Many Apple officials used to argue that customers don't care about such geekery as pre-emptive scheduling and memory protection. That's certainly true as far as it goes, but it misses the point the MacUser poll highlights: Users do care, intensely, about the stability and responsiveness of their systems, and few are satisfied with what they get in these respects from System 7.5.

No surprises in this data, just another bit of evidence to support a position some of us have been arguing for many moons: Providing an industrial-strength foundation for the Mac platform should be Apple's top priority — even if it requires radical revisions to previous plans. □

Henry Norr, editor emeritus of MacWEEK, welcomes feedback in the MacWEEK forums on CompuServe or at henry_norr@macweek.com.



LETTERS

Multitask, protect first

Apple's Mac OS strategy is going to seriously undermine the future of the Macintosh (08.12.96, Page 1). Putting off the release of the real part of Copland — preemptive multitasking, protected memory, new file system — until 1998 could well doom the Mac. Having these basic OS features is going to become a critical need as demands on the Mac increase with more complex client-server software.

I have been a developer for almost 11 years, working mainly on the Macintosh. The need for such real OS functionality has been apparent to the developer community for almost as long as client-server computing has been on the Macintosh. Apple has known about this. It tried and failed to find a remedy with the "Pink" OS/Taligent fiasco.

For all of Microsoft Corp.'s failings in the GUI world, it quietly set a course to build a real OS with Windows NT. It has done the hard work and now has an OS that is quite good (without considering the GUI).

Microsoft can improve the user experience of the GUI now knowing that it has a robust OS as its foundation. This is not rocket science. Apple may have the best user experience today, but it is built on the weakest of foundations.

My intuition tells me that there must be serious trouble in the Copland development effort. I do not want to see the Mac go the way of the Amiga. Public pressure on Apple to get with it and rework the foundation of the OS is the only way I can see to keep the Apple ship from sinking.

Tom Condon
Owner
Condon Consulting Services Inc.
Woodside, Calif.

Mac OS 99?

Regarding Apple CEO Gilbert Amelio's new incremental approach (08.12.96, Page 1): Is this a gentle way of saying Mac OS 8's new name is Mac OS 99?

The next release is scheduled for January, but that is quite a long time from now in the new world of software. This is the soonest we can expect new features?

Apple stated it believes that it needs to work closely with developers to ensure this new strategy succeeds, and the first fruit from this close working relationship is the company's cancellation of the Mac OS 8 Developer Release: Compatibility Edition CD.

Has Apple really not paid enough attention to what the users are saying? Has Amelio not seen the results of the MacUser survey? Does Apple think we enjoy installing 20-Mbyte system updates?

I'm just amazed.

Michael Grabenstein
Library database/Internet administrator
NASA/GSFC
Greenbelt, Md.

System 6 déjà vu

I enjoyed Henry Norr's 08.19.96 column (Page 24). He is quite right when he states developers don't have much to go on. I think, however, that Apple thinks we have short memories. I remember the transition from System 6 to 7 quite well.

The new OS was late, applications didn't work and problems abounded. At that time, Apple promised developers that future enhancements would come more incrementally rather than in a monolithic heap.

It's déjà vu: I am hearing the same promises being made to developers now as I did then. The difference this time is that Apple is consciously making the promise more widely known to the public and the press instead of just developers. Because of this, the company is more likely to keep its promise.

Cynic that I am, I see the whole thing as an admission that Copland is way behind schedule, and the shift to incremental increases is simply a way to put the best light on its failure. Mega-event or incremental, hype or no hype, Apple falls further and further behind with each passing month. As a longtime Apple fan, I still support the platform, but I get tired of hearing about Apple's same old tricks to hide its problems.

Bohm S. Kim
Software developer
Software Partners Inc.
Mountain View, Calif.

Incredible credulity

I read with considerable interest Don Crabb's column on the quality of Internet information (08.12.96, Page 25). I hope that many of the thoughts expressed within it have been "widely known" for quite some time, but his article was the first time I'd

See Letters, next page

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THE MAC MANAGER DON CRABB

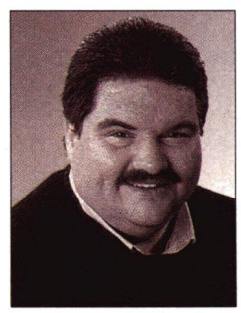
Network Server 700: Its middle name is 'work'

I've just finished unpacking our new Apple Network Server 700. We managed to get the thing up and running right out of the box without so much as a glance at the docs. We plopped in the AIX installation CD-ROM, typed "boot CD" and away it went!

Folks, this ANS 700 is a real computer. Apple ain't kidding around with this baby.

Loaded for bear

Our unit came with an upgradable 150-MHz PowerPC; 128 Mbytes of error-detecting parity RAM in eight DIMM slots; 1 Mbyte of Level 2 cache; five 4-Gbyte hot-swappable Fast and Wide SCSI-2 hard disks on slide-out trays (there's room for nine internal drives all told); six PCI slots; a PCI card for RAID levels 0, 1 and 5; one external SCSI-1 bus; two PCI Ethernet cards; a PCI Fast Ethernet card; a DAT drive; and an AppleVision 1710AV monitor.



And that's all in addition to the two load-balancing, redundant, hot-swappable power supplies and fans (with thermal sensors that shut down the server if the fans fail). The thing's even on locking wheels — or you can shove it into a rack, if you want.

In other words, the ANS 700 design team gave this server the works. And you get on-site, two-day service for a year as part of the warranty.

These hardware extras are accessible with a few click tabs and key turns. Those of us who have carved our fingers to ribbons trying to upgrade current Apple servers based on the Power Mac 8000 and 9000 series boxes should all shout "Hallelujah!"

The ANS 700 is beautifully architected — the first innovative, truly slick computer from Apple since the original beige toaster.

Too bad it's not a Mac.

A la carte applications

The ANS 700 and 500 don't run the Mac OS. They run AIX — a rock-solid, POSIX-compliant, honest-to-God Unix licensed from Big Blue. Nothing like the A/UX nightmare we all remember with a shudder (although I still run that OS on a workhorse-reliable Apple Workgroup Server 95). AIX on the ANS 700 works. And works. And works.

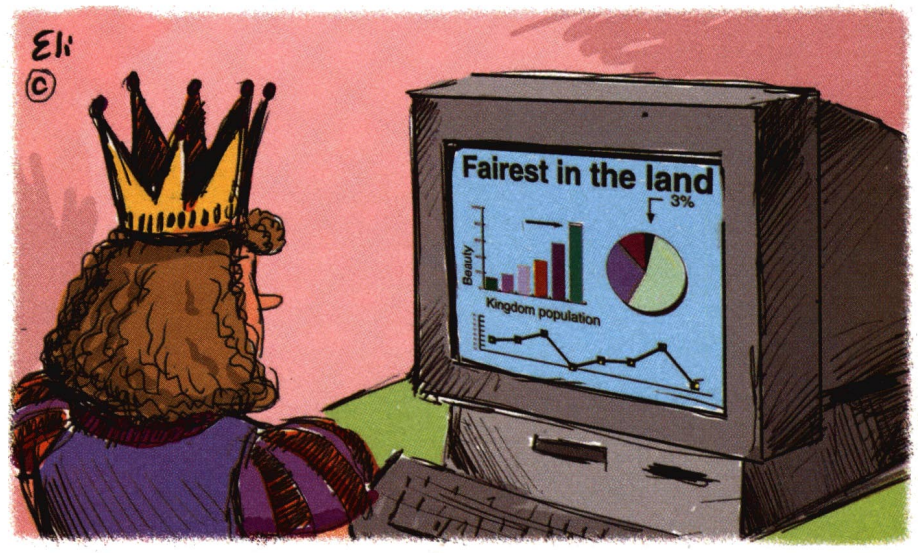
For file service you strap on either Information Presentation Technologies Inc.'s uShare or Helios Software GmbH's EtherShare or PCShare. But you can't strap on the Mac OS, and you can't even load Apple's Macintosh Application Environment to run Mac applications from the AIX server like you can on some other Unix boxes.

Outside influences

The ANS 700 was clearly designed with a competitive eye on other high-quality network servers in its price range. In fact, when I first took our 700 apart it struck me that the designers had paid close attention to the current PowerPC-driven IBM AS400 servers and somewhat less to the current line of Alpha servers from Digital Equipment Corp.

That's very good news for all of us. It means that Not Invented Here might be dead in one important part of Apple — the Alternative Platforms and Servers Division. And maybe that change will find its way to other Apple hardware groups (the PowerBook group immediately comes to mind) and to the Mac OS team, where AIX with the Finder strapped onto it sure looks good right about now. □

Don Crabb welcomes comments at his Internet address decc@cs.uchicago.edu. You can also check out his home page at http://cs-www.uchicago.edu/~decc/.



Fairy tales revisited.

Comments? Ideas? Contact Eli at elitoons@aol.com

Letters

From previous page

seen them articulated quite so clearly.

This increasingly common practice of flaming anything at all and at will is an interesting phenomenon. It is not difficult to visualize the potential for misguided zealots mobilizing an uninformed mob against enemies real or imagined.

The hysterical reaction to almost any news item, and the incredible credibility that travelers on the Internet attach to just about anything they read there, is troubling. It is almost as if readers reject any possibility of fraudulent intent or error in a message they find on the Internet.

I can't guess Crabb's feelings on these comments, but my reaction to his article is that it portends a troubling eventuality. I'm afraid I don't have very high hopes for the Internet once it mirrors the real world in terms of overpopulation. Does anyone remember CB radio?

Paul M. Smallwood
Account executive
Kaye/Bassman International Corp.
Dallas

Newsgroup fish wrap

Don Crabb's Aug. 12 Mac Manager column is unerringly, 100 percent on the dot. There is positively no way that any one of the 5 billion people on this planet could know all the products, statistics and quirks of the thousands of products on the market.

As for newsgroups being a source of reliable information: I think not. I was recently told via the Internet that "Apple had filed Chapter 11 and was closing its Cupertino office." This can't be true since, as everyone with any shred of sense knows, Apple is already dead.

Ryan Brooks
Animator/system administrator
Vidox Image & Data
Lafayette, La.

Too late for cute demos

On Page 1 of the 08.08.96 MacWEEK Report from Macworld Expo, you wrote that Frank Casanova, Apple director of the Advanced Prototyping Labs, showed a multimedia Finder that displayed a swimming pool with flowing water that moved in response to user clicks.

In past years, products like this from Apple were cute — we all enjoyed Apple's DogCow Tech Note, Easter eggs in the OS, etc. — but when the latest rumor is that Copland won't see the light of our Macs until 1998, announcements such as these from Casanova are no longer fun — they're annoying.

These futuristic demos make me ask why Apple's software engineers are wasting their time on features like interactive swimming pools instead of getting Copland working. Apple needs to understand that the OS wars are no longer a game but the platform that its very business depends on. The fun stuff can wait until Copland is in its customers' hands.

Kurt Tappe
Electronic production manager
Associates Graphic Services
Wilmington, Del.

Now betrayed Mac users

I have never been a Mac evangelist. In fact, I've spent most of my career in the Wintel arena. I must say, however, that I was miffed when Now Software Inc. chose to beta its Netscape Navigator plug-ins in the Windows 95 format first. It is Mac managers such as myself who have fought for and supported Now Software in our shops.

I personally take great pride in being on the cutting edge, and I had made Now's Web Publisher our calendar solution for the Web.

If Now Software is going to treat like poor stepchildren those who have fed it, then it may become obsolete along with the many of us who stick with the Mac OS. The least Now Software could do is release applications simultaneously to prevent us from feeling that the company is thumbing its nose at its bread and butter.

Steve Harbin
Chief investment officer
Bill Glass Ministries
Cedar Hill, Texas

what if your PC could see?
BIKER CLUB NEWS
We had a great turnout for our annual bike race to Sarasota. More than 175 people from five different states biked the 300-mile trek to raise money for charity. All in all, $5,000 was raised for the local children's hospital at the end of the race, we all got a chance to get to know over subs, sodas and tug-of-war, all the food by a local Sarasota deli. Many thanks to all.
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StudioStar $985
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QuickTime VR clips and art made with ArchiCAD 5 are at http://www.graphisoft.com/archicad/archicad.html.

ArchiCAD 5.0 raises roof with enhanced productivity tools

By Timothy E. Johnson

But Graphisoft app's archaic restriction of designing mostly in Plan view remains.

ArchiCAD 5.0, Graphisoft U.S. Inc.'s upgrade of its 3-D CAD system for data-intensive commercial projects, offers architects many new presentation and productivity goodies, such as better roof, wall and dimensioning tools; photo-realistic rendering with textures; and facilities-management features. But, much to our frustration, the $3,795 application still lacks full graphical editing in Section or Side views.

In ArchiCAD you create walls, slabs and roofs directly in 3-D using the Top, or Plan, view. While you can use the mouse to lay out these elements in Plan, you must use the keyboard to supply their heights (and sometimes their tilts). Graphisoft promised this archaic restriction would disappear in Version 5 — at least when it came time to edit your design. What arrived is a half-baked method for graphically manipulating objects in 3-D, compromised by the program's legacy data structure. You can drag elements only in Section and Side views. The exceptions are windows and doors, which are graphically resizable everywhere.

If you're comfortable doing most of your design in Plan, you'll find the rest of ArchiCAD a winner. Most of its new tools are unique among CAD systems.

The new 2-D Spline tool is really designed for laying out serpentine walls and organically shaped roofs. You can extrude lines, arcs and splines into smoothly curved walls using a keyed-in thickness — no more slablike approximations. The Window and Door tool punches a projected hole anywhere in an arc-shaped wall, producing curved sills and headers. Unfortunately, walls made from splines are approximated with extruded arc segments, so any window placed too near a segment boundary gets chopped at the segment. The work-around is to put an empty hole in the adjacent segment that fits the window extension; Graphisoft should free its users from labor like this.

The Column tool makes square or rectangular columns with independent fill patterns for depicting the core and veneer elements in Plan view. You can declare how columns place in a wall; they'll either cut places for themselves or inherit the wall's surface material.

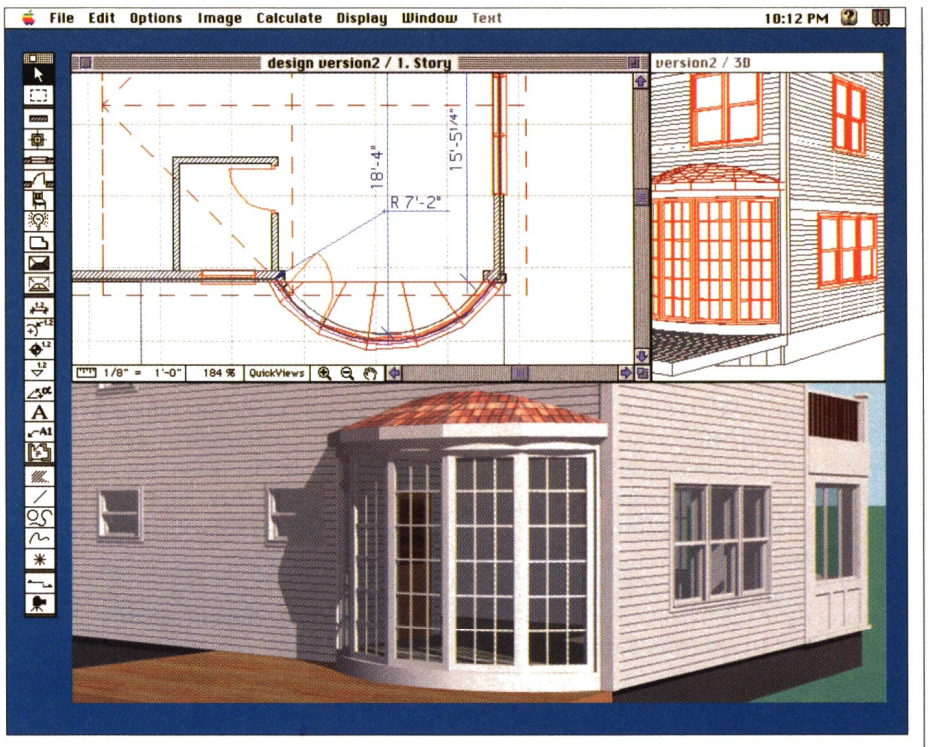
CAD on a complex pitched roof

Three new roof tools complement the Pitched Roof tool. But unlike that tool, the new tools lay out multiple roof planes in one operation, making it even easier to enclose a space.

The Complex Pitched Roof tool initially behaves like a Polygon tool: You draw a polygon defining the eave lines in the top view. Once you close the polygon, the program displays a dialog box for typing in the roof angle, overhang, thickness, fascia orientation and maximum height. Then you hit OK and the roof appears. If a roof plane meets another roof plane before the height is reached, that plane will go no higher, but other planes are free to intersect at higher ridge heights. A horizontal plane tops off the roof if all planes reach the maximum height without meeting another roof plane. You can edit each plane to form new ridge lines.

The new Barrel Vault tool is the only tool that lets you draw in Section. You begin by bringing up the Spline tool to draw the roof's cross section. Terminating the spline gives you a rubber band line to define the height to the floor. Clicking again lets you draw the vault's length. You can click on any arc, polygon or previously drawn spline to bypass the first step. The barrel vault is constructed from a series of slab segments, through which you control the fit's fineness. You're out of luck if you

See ArchiCAD, next page



We used the highest-quality settings in Graphisoft's ArchiCAD 5 to produce this rendering. The underlying 3-D window lets you set up the rendering. Hatches and vector-based shadows appear here; you can also shade the drawings with the associated material's solid color.

SCORE CARD

ArchiCAD 5.0 ◆◆◆◆

Graphisoft U.S. Inc. **List price: $3,795***

Hits: New roof tools excel at enclosing spaces quickly; new textures for the fast Phong renderer; facilities management feature generates useful reports; smarter cursor.

Misses: Limited graphical editing in 3-D; rudimentary texture parameter control; awkward database importing.

**Free upgrade from previous version if purchased after June 1, 1995; otherwise, $495.*

Key ◆◆◆◆◆ *Excellent* ◆◆◆◆ *Very good* ◆◆◆ *Good* ◆◆ *Fair* ◆ *Unsatisfactory*

UMAX PowerLook 2000 great pre-press flatbed

By Bruce Fraser

Binuscan software turns PowerLook into automatic pre-press scanner.

While UMAX Technologies Inc. has had some successes in the pre-press market, we've always thought of it as primarily targeting the business and home office markets while its OEM partners — previously Agfa, a division of Bayer Corp., and currently Linotype-Hell Co. — packaged UMAX engines with software for the pre-press market.

That has all changed with UMAX's PowerLook 2000. Aimed at pre-press and graphic design users, it competes directly with Agfa and Linotype-Hell. While quite similar in performance to Agfa's DuoScan, the PowerLook 2000 stands out with its interesting and useful bundled software.

On paper, the $5,495 PowerLook 2000 specifications are similar to the DuoScan (see 06.10.96, Page 31) — 1,000-by-2,000-dpi resolution, a dynamic range of 3.3, and 36-bits-per-pixel capture. Like the DuoScan, the PowerLook 2000 can handle both reflective and positive or negative transparent originals. The PowerLook doesn't have the DuoScan's twin-plate scanning technology; instead, it features a conventional transparency adapter

See PowerLook, Page 34

ARA MultiPort Server speedy but still flawed

By Jonathan A. Oski

Better security and access, yet installation still imperfect — and it remains Mac-only.

If you're lucky enough to have scored a scarce PowerBook, remote access to an AppleTalk network is probably one of your essential needs. To fill it, Apple recently updated its Apple Remote Access suite. The newest addition to the line — the Apple Remote Access MultiPort Server 2.1.1 PCI Version — offers faster connections and better security options. But as before, all parts of ARA are based on a Macintosh-specific protocol, locking out all other platforms.

The MultiPort Server, with an estimated retail price of $1,099, includes four copies of the ARA Client 2.1 and a six-port Smart Serial 6 card from Keyspan, a division of InnoSys Inc.

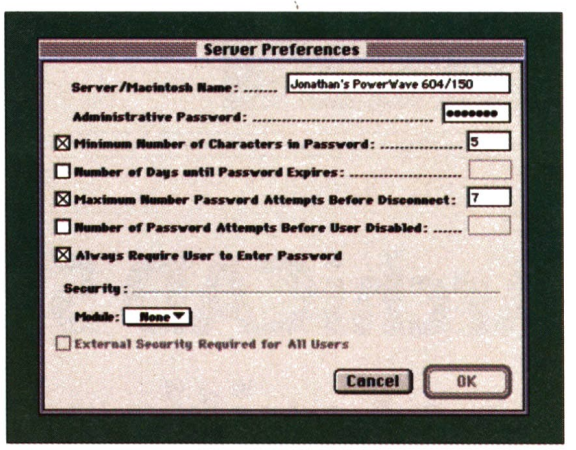
The server works on any Power Mac with System 7.5.3 and one or more free PCI slots. Up to three cards can be installed, although the software will recognize a maximum of only 16 ports. Because of heavy system loads when multiple clients are accessing it, the MultiPort Server works best on a dedicated Mac.

The ARA Client 2.1 and ARA Personal Server 2.1 are both free to users of Version 2.x of ARA. The two products remain essentially the same, delivering marginally improved 28.8-Kbps connections. Like the MultiPort Server, they offer new support for 115.2-Kbps links via ISDN with the addition of appropriate hardware.

Configuration complications

Apple released a four-port NuBus-based server in February; until then, its only ARA server offering was the single-port ARA Personal Server. Aside from performance improvements and a few minor tweaks, little has changed with the Personal Server since we last reviewed it (see 03.21.94, Page 51). As the name implies, the Personal Server is best-suited for a single user to remotely access a single computer or network.

Before Version 2.1 of the Personal Server and Client, installing ARA on Macs that require System 7.5.3 was a problem, since the installer script would replace some of the Mac OS networking code and could corrupt system software if not installed in the proper sequence. The new versions of these two products fix that problem and make ARA fully compatible with Open Transport 1.1 or later. When we upgraded Version 2.01 using the patcher application posted on Apple's Web site, the Remote Only extension was not updated to the latest release. A full installation over an existing one worked properly.



The Server Preferences dialog box in ARA MultiPort Server 2.1.1 gives you a quick glimpse at its enhanced security.

While some installation problems throughout ARA have been resolved, there are still conflicts and inconsistencies. If you'd like to use file sharing, you'll need to invest in AppleShare 4.0.1 or later; both products access the same Users & Groups file, however. And the MultiPort Server cannot run concurrently with the Mac OS' built-in file-sharing scheme because installing the server converts your Users & Groups file into a new format that the built-in file-sharing system cannot recognize.

Controlling access

If you've been flustered by ARA's infamous pollution of your Extensions folder, you'll be pleased to find that all modem scripts are now in a separate Modems folder within your Extensions folder. Also, you no longer need to specify Version 1.x compatibility in your connection documents, and the sometimes problematic Remote Access Aliases extension has been eliminated.

In addition to its single-port limitations,

See ARA MultiPort, Page 34

ArchiCAD

From previous page

want to make a smoothly curved vault, however, unless it's formed by an arc.

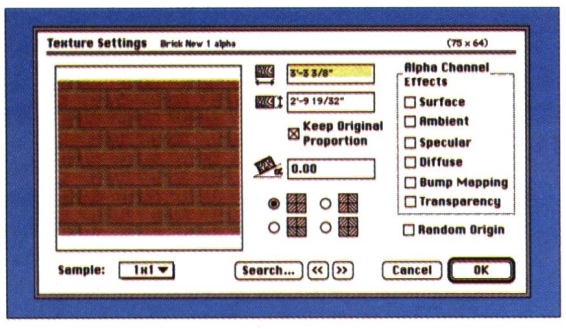
The Dome tool initially behaves like the Arc tool. Once you complete the arc, or circle, you type in the dome's thickness, fascia orientation, height, and number of approximating horizontal and vertical linear segments (no circular segments here). You can get a shallow dome by typing in a height that's less than the dome's radius. The tool won't generate a dome higher than its radius. You must resort to the integrated programming language to cut a full dome with a plane.

These roof tools excel at enclosing spaces quickly with economical skins composed of straight rafters. You'll have to import shapes from other CAD packages if you want to build an expensive, doubly curved roof, though. The program imports and exports PICT and AutoCAD DWG and DXF formats, and it exports 3-D information to StrataVision, RenderMan, topCAD, Atlantis, Wavefront and Electric Image formats.

2-D drafting gets stronger

One of the program's previous weaknesses, 2-D drafting, is nearly corrected in Version 5. The associative dimensioning now includes radial and angular dimensioning. The cursor is smarter; it snaps to 2-D intersections and finds tangents and perpendiculars in Plan as you lay out 2-D and 3-D primitives. A new pop-up palette, which appears under the cursor when you edit a slab's edge or vertex, lets you fillet a vertex, turn an edge into an arc or resize the polygon. You can draw a polygon-shaped marquee to select irregular fields of elements instead of selecting with the usual rectangular marquee. Amazingly, you still can't draw an ellipse directly.

Those who want to use ArchiCAD for presentations will welcome the addition of textures to its shadow-casting Phong renderer. You can use any PICT, TIFF or GIF file as a texture, but control is rudimentary. You specify the texture's scale and rotation numerically, but there's no way to control the texture's location on an object. The manual says you can associate a single halftone mask (as an alpha channel) with the texture to control any combination of transparency, diffuse, ambient, specular or bump mapping. However, we couldn't get the bump map to work. Graphisoft identified the problem as a bug and is working on a fix. The other maps behaved well, but we thought the transparency map could work better.



In the new Texture Settings window (from the Materials dialog box), the scaling text boxes are keyed to the scale of your drawing, but there's no way to designate a texture's origin.

ArchiCAD ships with a complete set of QuickTime VR camera tools for creating object movies and multinode panorama movies. Each node also saves as a panographic PICT file for editing. (You'll need Apple's free PanoTool to convert the result back into VR movie.)

Managing your money

ArchiCAD has always been good at managing projects. Now the new Zone tool takes ArchiCAD into the field of facilities management. All objects, such as furniture, dragged into a zone will show up in the new Zone report, which also lists a zone's bounding walls, doors and windows.

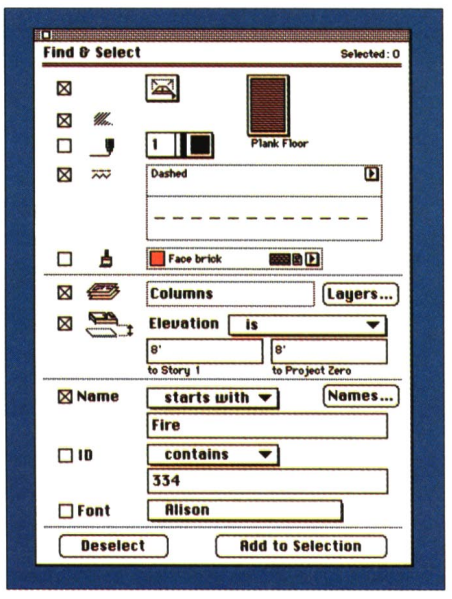
You create a zone by clicking inside an area defined by walls (the walls don't have to form a continuous perimeter). You can also define zones over multiple spaces by using the Zone tool to draw the enclosing polygon. The tool responds by coloring the area with a transparent fill and stamping the fill with selected information calculated from a predefined list (such as name, area, perimeter and elevation).

Query capabilities for creating reports are limited. You can easily export a report as a spreadsheet file for further refinement, but bringing any spreadsheet changes back in requires laborious programming in ArchiCAD's language. We got the impression that database importing was rushed to market.

Conclusions

ArchiCAD 5's new roof and spline tools will appeal to architects, and Graphisoft has plugged holes in the 2-D drafting segment, enabling ArchiCAD to cover all project functions, including facilities management and fully textured presentations. But nobody will like ArchiCAD's continued lack of full graphical editing in Section or Side views. Nevertheless, no other CAD system on the Mac makes it so easy to roof-over spaces and manage architectural project data.

Graphisoft U.S. Inc. of San Francisco can be reached at (415) 703-9777 or (800) 344 3468; fax (415) 703-9770; info@graphisoft.com; http://www.graphisoft.com. □



The new Find & Select dialog box lets you select objects using Boolean criteria. Check boxes further limit your search. The first row holds a pop-up for selecting the object's graphical type.

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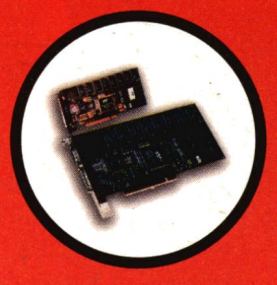

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ARA MultiPort

From Page 32

the Personal Server's usefulness is hampered by the level of security it provides. Its only means of securing access involves passwords and call-back procedures. Given the degree of functionality remote access can provide, it's important to make your computer and network as secure as possible.

The MultiPort Server offers considerably more security. You can control password characteristics, such as length and expiration date, to ensure that passwords meet certain criteria.

In addition, the server can thwart "war-dialing" break-ins by disabling passwords after a specified number of incorrect attempts. Call-back features are also more robust because you can designate a specific port for call-back. More importantly, you can incorporate third-party external security — such as a line-level device or a protocol-level product — that works in conjunction with the MultiPort Server to restrict unauthorized access. (We did not test any of these additional products.)

Conclusions

If you're using Version 2.x of the Client or Personal Server, we recommend you take advantage of Apple's free upgrade to Version 2.1 — especially if you need access via ISDN. For those in search of a multiport remote-access server, consider that ARA remains a Mac-only solution. (Apple has indicated that ARA 3.0 will incorporate Point-to-Point Protocol, but this release is not likely to surface before the end of the year.) Also, you must factor in the cost of the host Mac.

A number of other vendors, including Attachmate Corp. and Tribe Computer Works Inc., offer competitive multiport server solutions for Mac and Windows clients. If your remote-access requirements extend beyond the Mac, these third-party products may be less of an administrative burden.

Apple can be reached at (408) 996-1010 or (800) 767-2775; fax-back (800) 462-4396; http://www.apple.com. □

SCORE CARD

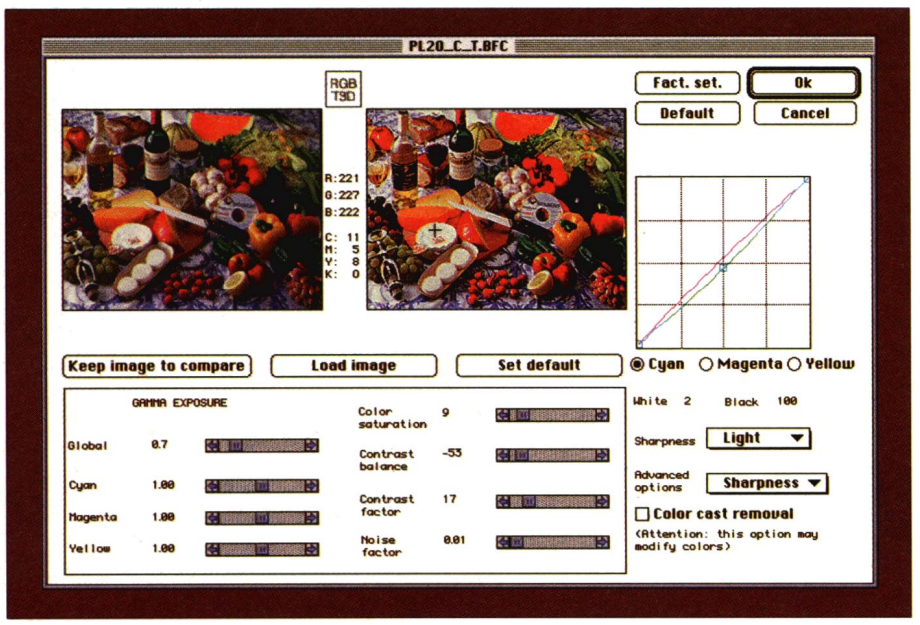
ARA MultiPort Server 2.1.1 PCI Version ◆◆◆

Apple **Est. retail price: $1,099***

Hits: Supports 28.8-Kbps modems and ISDN adapters; improved performance, flexibility and ease of use.

Misses: Best-suited to a dedicated Mac; still accepts only Mac clients; relies on proprietary protocols.

**Includes four copies of ARA Client 2.1 and Keyspan's six-port Smart Serial 6 card. ARA Personal Server 2.1 is $189 separately; ARA Client 2.1, $59; updates from Version 2.x, free.*



Binuscan's PhotoPerfect, bundled with UMAX's PowerLook 2000, uses artificial intelligence techniques to analyze and correct images, convert them to CMYK, and apply unsharp masking.

PowerLook

From Page 31

that replaces the lid of the scanner. It has a smaller scan area for reflective material than the DuoScan's (8 by 11.7 inches, compared with the DuoScan's 8 by 14 inches), but it's also slightly faster than the DuoScan — 44 seconds for a 4-by-5-inch, 1,000-dpi scan, compared with 50 seconds for Agfa's unit.

Like the DuoScan, the PowerLook 2000 comes with a full-featured Adobe Photoshop plug-in. Our one major complaint with MagicScan 2.4.1 is its fixed-size preview window. You can zoom in on the preview, but even with the high-resolution preview option selected it's difficult to set the crop precisely on high-resolution scans. Other than that, MagicScan has all the features you'd expect from scanning software in this price range, including full manual control over white-point/black-point setting; gamma; curves; and color balance for shadow, midtone and highlight ranges. It also offers three levels of descreening for scanning previously halftoned material and sharpening on the fly. You can also scan directly to CMYK using either Eastman Kodak Co.'s Color Management System or Apple's ColorSync. Batch scanning rounds out the feature set.

PhotoPerfect

But UMAX offers something extra in the software department: the master version of Binuscan Inc.'s PhotoPerfect. PhotoPerfect turns the PowerLook 2000 into an automatic pre-press scanner by using artificial intelligence techniques to analyze and correct images, convert them to CMYK and apply unsharp masking. (It can also deliver RGB images on request.)

We were skeptical at first — the manual instructs you to adjust the brightness and contrast of your monitor until the image of Monaco on the splash screen "looks nice," which doesn't inspire a huge amount of confidence — but after some time with it we were pleasantly surprised by the results. PhotoPerfect produces CMYK scans similar to what you'd get from a trade shop if you simply asked for a scan and didn't provide special instructions. Examination of the histograms shows PhotoPerfect is doing something clever in terms of interpolating tonal information. Even on heavily corrected scans it delivers a smooth histogram, and the images show no trace of posterization.

PhotoPerfect is a great tool for novices; it lets them produce acceptable CMYK scans with no intervention. But we suspect that pre-press pros will also find it useful, at least for noncritical work. While inexperienced users will (and should) stick to the default settings, pros will find they can exert a fair amount of control over PhotoPerfect. It offers UCR or GCR separations, each with three choices of total ink limit, and gives the option of building halftone screens into EPS files.

Digging deeper, you can modify the global gamma and the gamma for cyan, magenta and yellow; adjust contrast and saturation; set tone curves for cyan, magenta and yellow; and vary the strength of the sharpening PhotoPerfect applies. Unfortunately, you can't save your settings. You can, however, make a custom setting the default or restore the factory settings with a single push of a button. If the bulk of your work uses the same output conditions, take the time to create custom defaults for PhotoPerfect tailored for your situation; once you do, scanning will become a largely automatic process. Of course, PhotoPerfect will treat all images the same way, which may not be what you want, but that's a limitation shared by all automatic color-correction packages.

Performance

We made some quick, side-by-side comparison scans using the PowerLook 2000 and the DuoScan, and we obtained similar results. A skilled operator could get excellent results from either scanner on any original that falls within the scanners' dynamic range, which includes all but the most contrasty chromes. The DuoScan had perhaps a shade less noise in the shadows, while the PowerLook 2000 produced a slightly sharper image. But the differences were very slight indeed.

The PowerLook 2000's resolution is high enough to get usable results even from 35mm originals: We scanned several 35mm slides and negatives at 2,000 dpi and were pleasantly surprised by the results, even though the scanner was using interpolation in one dimension at that resolution.

Conclusions

The PowerLook 2000 is an impressive scanner. The dynamic range is high enough for all but the most demanding originals, and the resolution is high enough to get usable results even from 35mm originals. But it's the inclusion of PhotoPerfect that makes the PowerLook 2000 valuable to a much broader group of users. For designers who need scans quickly but lack pre-press experience, PhotoPerfect makes it an attractive solution, while pre-press pros will find it a useful and flexible tool.

UMAX Technologies Inc. of Fremont, Calif., is at (510) 651-4000 or (800) 562-4000; fax (510) 651-8834; fax-back (510) 651-3710; http://www.umax.com. □

SCORE CARD

PowerLook 2000 ◆◆◆◆◆

UMAX Technologies Inc. **List price: $5,495***

Hits: Excellent dynamic range; high resolution; very capable software for pros and novices alike.

Misses: Nonresizable preview in MagicScan plug-in makes it hard to set crop accurately; PhotoPerfect slightly less flexible than we'd like.

**Bundled with Binuscan PhotoPerfect.*

The MagicScan plug-in has all the features you'd expect from scanning software in the PowerLook 2000's price range. Our one complaint: the fixed-size preview window.

For the record

Contrary to our report on the UMAX S900L/604e/200 review (08.05.96, Page 76), models in Power Computing Corp.'s PowerTower Pro line have 1 Mbyte of Level 2 cache. Also, our Avid Cinema review (08.05.96, Page 83) incorrectly stated that the product works on the Power Mac 7200; it works on the Power Mac 7500 without additional hardware.

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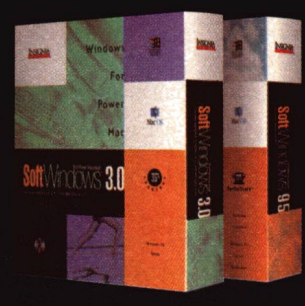

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Quality is Everything

HEALTH LETTER
Summer 1996
Volume 5, Issue 3
The Olive, The Grape, And Your Heart
At last, some refreshing good news about the foods you love. There are foods that are good for you (other than broccoli, Mr. Bush). Several years ago, science confirmed the wine drinker's long-held assumption that drinking wine in moderation is beneficial to one's health.
The first studies indicated that red wines contain
antioxidant. Salicylic acid also helps lower cholesterol and prevent blood from clotting in clogged arteries. Some studies suggest that 30 milligrams of aspirin a day may help to keep the heart healthy.
Olive oil, which contains heart-healthy monosaturated fat,
Continued on page 3
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If quality is your Number One priority, Dataproducts' Typhoon 8 laser printer is your Number One choice. *MacUser* (September 1995) calls the Typhoon 8's 1200 dpi output "stunningly realistic... photographic quality" with "perfectly smooth, crisp text" and "smooth grayscale ramps, rich blacks, and full shadow detail."

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MacUser RATED 1/2 SEPTEMBER 1995

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CAD SALES TO SLOW?

The CAD software market grew by 20 percent in 1995, but Dataquest Inc. predicts a slowdown in coming years.

COMPUTER-AIDED DESIGN

Users build a CAD arsenal: Best of breed vs. all-in-one

By April Streeter

When it comes to using advanced features such as 3-D rendering, visualization and photo realism, Macintosh CAD users seem to be evenly split between those who look to a core program to meet their needs and those who integrate functionality with third-party offerings.

With nearly all Mac CAD programs supplying some measure of 3-D functionality, and a plethora of 3-D modelers vying for the market, it is not always easy for companies to pick and choose. Depending on a CAD program to cover 3-D can reduce training costs but also greatly increase workstation memory requirements. On the other hand, a best-of-breed approach, which favors a variety of software, can mean higher purchase, training and software support costs, as well as problems integrating different file formats.

For Orcutt/Winslow Partnership, a full-service architectural firm in Phoenix, ArchiCAD from San Francisco-based Graphisoft U.S. Inc. has kept pace for five years as the company's all-in-one design and drafting choice. Specializing in educational and medical construction, Orcutt shifted from a Unix-based design system to an all-Mac site using ArchiCAD about five years ago.

Although the firm's CAD toolbox includes productivity programs such as Microsoft Corp.'s Works and Excel for storing design notes, and Adobe PageMaker for graphics placement, ArchiCAD is clearly Orcutt's workhorse.

Chuck Hill, project manager at Orcutt/Winslow said: "I'd say ArchiCAD covers about 95 percent of our needs; almost all of our work is done in it. At the time we made our decision we were simply going for powerful 3-D modeling and a good materials database. We didn't consciously make the decision to [focus on] ArchiCAD exclusively, but we now see the all-in-one approach as a benefit."

Mac advantage

Because Orcutt is an all-Mac shop, Hill said users have "a leg up" when it comes to ease of use, an advantage further enhanced by favoring ArchiCAD. "Less software to support means less expense and less training; you only have to teach new people one product," Hill said. "The modular approach doesn't really appeal to us. We're not a small firm, and for us ArchiCAD's specialization in drawing buildings makes it much better than going modular."

"No CAD program should try to be everything to everybody."

— Paul Murphy, Markitecture

Hill said ArchiCAD's memory requirements have not been an issue thus far. Orcutt's clients generally don't demand sophisticated 3-D work, and the firm has had to do only a handful of animated walk-throughs of prospective buildings. However, recently a decision was made to purchase Atlantis Render from Abvent SA in case Orcutt needs to do more powerful renderings, as Hill admits ArchiCAD "could get overwhelmed" with large rendering projects.

In addition, Orcutt is branching more and more into facilities management and decided to buy Aperture, a specialized program from Aperture Technologies Inc. of Valhalla, N.Y., to handle those projects. But Hill said ArchiCAD will continue to be the design focal point. "We've even talked to Graphisoft about links or hooks that would move ArchiCAD in the direction of facilities management," he said.

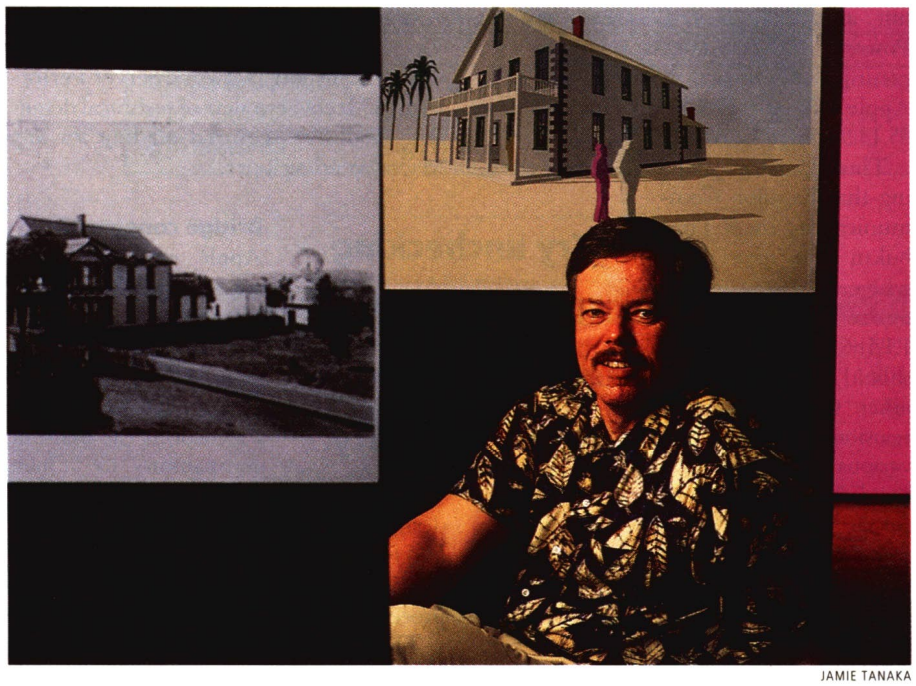
Abandoning 2-D

At the opposite end of the spectrum, Dwight Morejohn, general manager at the Davis, Calif.-based Capturing Concepts, can reel off a long list of software programs his firm uses to create design blueprints for anything ranging from cars to airport terminals. The list includes high-end 3-D modelers, such as form*Z from Autodessys Inc. of Columbus, Ohio, down to graphics applications such as Adobe Photoshop. Capturing Concepts has all but abandoned working with 2-D drafting; it prefers to choose 3-D CAD programs based on each job's needs.

"We have a lot at our disposal," Morejohn said. While mostly a Mac shop, some of Capturing Concepts' high-end modeling and design is done on Silicon Graphics machines using SGI's Alias Wavefront.

Instead of CAD, Morejohn said he starts many jobs with WalkThrough Pro from Virtus Corp. "Take the example of the design of a business-class jet aircraft we did,"

See Solutions, next page



JAMIE TANAKA

David Bailey, senior architect for the California Parks & Recreation Department, finds MiniCAD's 3-D features too laborious for most of the initial conceptual visualizations he wants to do. He prefers to use Design Workshop with Adobe Photoshop for those tasks.

GORDON STUDER

MACINTOUCH

RIC FORD

Betas shake out bugs and move Mac OS ahead

Apple's Open Transport group seems to be working in a sensible, effective way to move improvements out the door to customers. Those customers include developers, end users and business partners, and their feedback is flowing back to engineering with the help of the Internet. Unless I'm missing something, this looks like a fine model for other groups at Apple to follow. (Even the version numbers make more sense than those of recent system releases.)

As I write this, a public beta release, Open Transport 1.1.1b6, is working better on my Power Mac 7500 than the official Open Transport 1.1 version did, eliminating some problems with FTP transfers. Some readers also report good results with it.

Unfortunately, several other readers encountered frequent crashes after installing this unsupported version. A typical symptom is a Type 11 bomb, although a Type 11 can occur without even running Open Transport, and other types of crashes can also occur under Open Transport.

Disabling Connectix Corp.'s RAM Doubler 1.6.x solved the problem for some people. Others ran RAM Doubler and Open Transport together without trouble.

See MacInTouch, next page

SOLUTIONS

From previous page

Morejohn said. "We were required to deliver the designs in an absolutely photorealistic way. But before we even got to that level of detail, WalkThrough helped us communicate very clearly about the design. We had the client using WalkThrough as a storyboarding tool, both of us going back and forth until the model began to take shape."

Morejohn said few files created in WalkThrough are subsequently imported into the 3-D CAD programs chosen for a particular design.

However, the better upfront communication with clients facilitated by WalkThrough makes the trade-off worthwhile.

"WalkThrough is a good visualization tool for early in the process. It is important to us because we can build quickly, whip out something impressive in the first cut that really assists the client in communicating back to us what they do and don't want," he said. "We do have to re-create the project [in a CAD program], but we cut down the prototyping time drastically and can move quickly into the details stage of design."

> "WalkThrough is a good visualization tool for early in the process."
>
> *— Dwight Morejohn, Capturing Concepts*

Best of breed

Because Capturing Concepts focuses on 3-D and multimedia work rather than on a specific design category, Morejohn said zeroing in on one or a few programs isn't feasible or desirable. "It's not a detriment for us to go back to CAD after starting with WalkThrough," he said. "We might spend two to three hours on a basic model that gets us a lot of confirmation and confidence regarding what higher-end tool we'll use for the intricate modeling. Smaller studios might have to squeeze the full potential out of a limited number of products, but for us, our clients require more than that."

Somewhere in between Orcutt and Capturing Concepts is Markitecture, an architectural and exhibit design firm in Arlington, Mass. Architect Paul Murphy does all of his 2-D drafting and a significant portion of his 3-D modeling in MiniCAD from Diehl Graphsoft Inc. of Columbia, Md.

Murphy also depends on Infini-D from Specular International Ltd. of Amherst, Mass., for high-end 3-D. "Infini-D and MiniCAD are pretty good when put together, at least for what we need to do," he said, although Murphy would like his CAD and modeling programs to be even better integrated. "Seamless integration between the two — for example, being able to drag and drop a 3-D object from one program to the other — would be great," Murphy said.

Even if no further integration is possible, however, Murphy said he favors the best-of-breed approach. "I would still go back and forth regardless of how MiniCAD was enriched. Infini-D is a solid animation and rendering program and doesn't try to do more," he said. "If MiniCAD took that on, it would be too big, too clunky.

"Look at what happened to AutoCAD [from Autodesk Inc. of Sausalito, Calif.] when it went from 2-D to 3-D to serious solids: Even if you didn't want those features, you still took the penalty in disk space," Murphy said. "I think the strategy for MiniCAD is terrific. No CAD program should try to be everything to everybody."

Architects are seeing in 3-D

CAD vendors started promising new versions of their programs with support for Apple's QuickDraw 3D architecture last fall, but it will be closer to fall 1996 before many of them deliver full support.

QuickDraw 3D consists of three elements: a rendering engine; an interface development kit; and a new file format, 3DMF (3-D metafile format). Thus far, CAD programs such as Diehl Graphsoft Inc.'s MiniCAD and Graphisoft U.S. Inc.'s ArchiCAD included only support for reading and writing 3DMF files.

But at this month's Siggraph 96 show in New Orleans, CAD vendors such as Artifice Inc. gave delivery dates for versions of their programs enriched with the QuickDraw rendering engine.

David Bailey, senior architect for the California Parks & Recreation Department, is beta testing Artifice's next release of Design Workshop, Version 1.5.

"In Version 1.2 we could render but not nearly as fast and not nearly as good as we can with QuickDraw 3D in the new version," he said. "With a 120-MHz Power Mac, there's very little delay. After an initial rendering, you can make changes practically in real time."

While he thinks QuickDraw 3D is the first step toward more widespread use of 3-D visualizations by architects, he's puzzled that Apple failed to include the capability to implement shadowing of objects in the first QuickDraw rendering engine.

"Realistically, how often does an architect want to render an object without some kind of shadows on it?" — By April Streeter

Integration hopes

David Bailey, senior architect for the California Parks & Recreation Department in Sacramento, Calif., is another MiniCAD user who relies on several other programs. Bailey said he finds MiniCAD's 3-D features too laborious for most of the initial conceptual visualizations he wants to do. He prefers Design Workshop from Artifice Inc. of Eugene, Ore., which he uses with Photoshop.

Bailey said he is pleased that the addition of QuickDraw 3D technology to Design Workshop will help him render faster. But he doesn't believe that QuickDraw's 3DMF (3-D metafile format) can become standard enough to solve the file format dilemma that makes integration between CAD and other 3-D programs so difficult.

"There's a big missing file format somewhere," Bailey said. "AutoCAD's DXF [Drawing Interchange File] is pretty bad; totally inadequate for 3-D. It doesn't seem as if there's much out there."

While Bailey said that he has no problems exporting the visualization files he creates in Design Workshop in PICT format so he can enrich them in Photoshop, he must start over again with MiniCAD when he wants to produce the standard 2-D drawings that are required by engineers and builders.

"It's really one of our biggest problems," he said. "We can't afford to use ArchiCAD or one of the other higher-end programs, but we're doing a lot of repetitive work just because we can't get our files easily translated. It would be a huge help if someone out there would come up with a really good 3-D file format." □

MACINTOUCH

From previous page

(Connectix recently released RAM Doubler 2.0, which looks fairly robust in initial reports.)

Light load

A trick that sometimes helps Open Transport reliability involves the TCP/IP control panel option "Load only when needed." This check box appears after setting User Mode to Advanced (or to Administration) and then clicking the Options button. A colleague eliminated crashes with an earlier Open Transport version by unchecking the option, and several readers found that unchecking it helped reliability with the Open Transport beta. Installing or updating Open Transport may reset the option, so it should be reviewed after an update. Keeping it unchecked may also help avoid memory fragmentation (see 04.22.96, Page 31, and 04.08.96, Page 35).

One reader reported Type 11 crashes on Performa 62xx systems with OT 1.1.1b6, but another reported success on his PowerPC 603-based desktop systems after getting motherboard replacements under Apple's Repair Extension program (see 05.13.96, Page 1, and 04.15.96, Page 47).

Thom Unterburger passed along a warning that Farallon Communications Inc.'s Timbuktu Pro may crash when disconnecting under Open Transport 1.1.1b6, a problem that should be fixed in another Open Transport revision. Others reported various incompatibilities but did not yet have confirmation from the relevant companies.

Try unchecking "Load only when needed" option for more reliability.

Despite the bumps, Open Transport is maturing. A bug report template comes with the beta release, and sending reports to OTBeta@seeding.apple.com will help smooth the final release.

The software and documentation are available on a new Apple Open Transport Web page at http://dev.info.apple.com/evangelism/opentransport/newstuff.html. Among other items linked on this page is TechNote 1059, titled "On Improving Open Transport Network Server Performance." It covers a slew of technical details and should be required reading for any Mac server developer.

Bridge construction

Apple updated some other networking products recently, also releasing them on the Internet. Open Transport/PPP (Point-to-Point Protocol) is the dial-out companion to Open Transport 1.1.1. Redesigned from scratch for Open Transport and fully native on PowerPC-based models, OT/PPP is following the same release process as Open Transport 1.1.1.

There are a few reports about dropped connections and setup glitches with OT/PPP 1.0f1c6, the current public beta, but feedback looks generally positive. (The popular alternative, FreePPP 2.5.x, is going through public beta releases, too.) It is clearly in Apple's interest to finally make PPP transparently simple for Mac customers, and PPP is the foundation for future remote AppleTalk access.

Well after the release of other patchers (see 04.01.96, Page 53), Apple's LocalTalk/LaserWriter Bridge 2.1f2 updates Apple's earlier Ethernet-LocalTalk bridges for Open Transport compatibility. The free LaserWriter Bridge control panel supplied in Network Software Installer 1.5.1 (see 06.12.95, Page 38) is replaced by a new version, and a patcher in the package updates LocalTalk Bridge for people who purchased that product.

LocalTalk/LaserWriter Bridge 2.1f2 is another unsupported public beta, available at http://www.support.apple.com/pub/apple_sw_updates/Worldwide/Macintosh/Unsupported/. □

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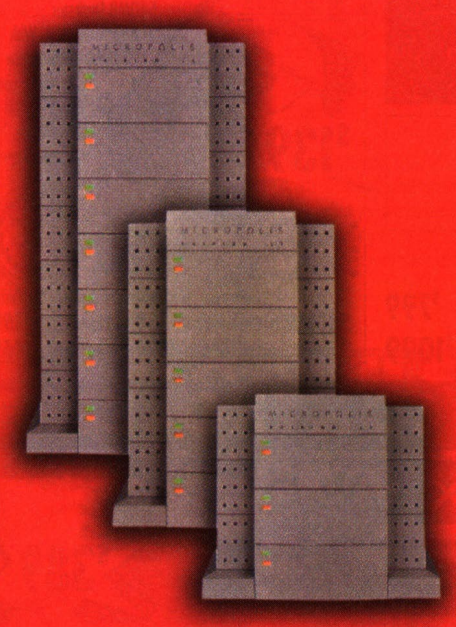

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C104 0901	ClubMac 2-4GB SCSI QIC MiniCartridge Drive (Cartridge not included)	$429
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C104 1302	ClubMac 4-8GB Performance DAT Drive	$999
V010 1018	Verbatim 90M 4mm DAT Cartridge 2-4GB	$9

DDS-2 DAT Drive

$879 C104 1303

Retrospect

OPTIMA TECHNOLOGY DeskTape

- Copy your data to a mounted DAT using the Finder
- Interchange your data with any DAT drive
- Store & backup your data incrementally. * with the purchase of a Tape Drive

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qlogic Corp.

$229 Q010 1007

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F094 1033	SCSI JackHammer PCI	$389
F094 1002	SCSI JackHammer NuBus	$459

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ClubMac® 4X

Features:
600KB/sec data transfer
190ms avg access time
Caddy-less design

$149 C104 1701

ClubMac®

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C104 1701	ClubMac 4X-Speed CD-ROM Drive	140ms	600k/sec	$149

NEC

		Access Time	Trans Rate	
N024 5501	MultiSpin 8Xe CD-ROM Reader	130ms	1200k/sec	$449
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radius

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E047 1019

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A055 1001

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- Transparency Module
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A055 1001 **AGFA Arcus II Desktop Professional Scanner** $1995

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E045 1003

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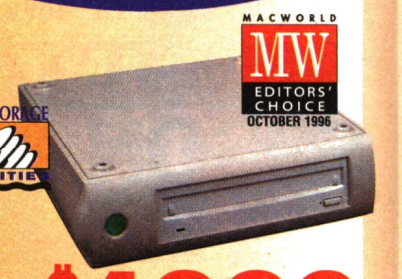

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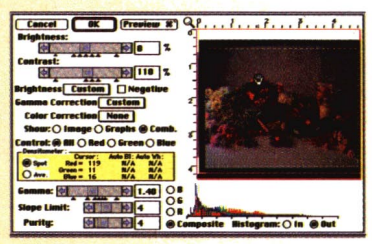

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PowerMac 5200CD $1199
- Integrated 15" Display & 4x CD-ROM drive
- Power PC 603/75MHz RISC processor

Power Macintosh 7100/66 8/700/CD from $1299*
- 66MHz PPC 601 RISC processor
- AV upgrade supports full motion video

*CPU only, with Qualifying Card or Monitor Purchase

QUADRA/MAC II SERIES

Quadra / Centris 610 8/80/CD	only $699
Quadra 700 8/80	$799
Quadra 800 8/250/CD NEW	$IN STOCK
Quadra 840AV 8/250/CD w/ Spigot Power AV	$1999
Quadra 950 8/500	$1399

Mac IIsi Color Pivot System
- Macintosh IIsi with 5MB RAM/80MB HD
- Radius Color Pivot Display
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- FREE ClarisWorks!

CPU only $299 — Complete system $799

Add Radius Card for Display to TV	only $199
Add Apple Cache Card to Macintosh IIci	$39

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SpigotPro AV $999*
- Upgrade for Nubus AV Macs
- 24bit Full-Screen, Full-Motion Video
- Includes Adobe Premiere
- * with purchase of Studio Array

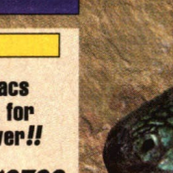
Video Vision Studio 2.5.1 $1999*
- 24bit Full-Screen, Full-Motion Video
- Includes Adobe Premiere and VideoFusion
- Breakout bar supports dual input
- * with purchase of Studio Array

Video Vision Telecast from $2999
- Full-motion, broadcast-quality video
- Available as upgrade for Video Vision Users

Video Vision Studio Array $1999
- 4GB RAID Customized for Video Vision
- Includes Fast & Wide SCSI-2 accelerator board
- Chain up to three Arrays together (4GB,8GB,12GB)

miroMOTION DC20 M-JPEG PCI video capture & playback	$CALL
ATTO Silicon Express IV 20MB/sec SCSI accelerator	$599
Truevision Targa 1000 & 2000 PCI/NUBUS	$CALL
RasterOps MoviePak II JPEG Daughtercard Upgrade	$CALL
Spigot II Tape Now Bundled with Adobe Premiere	$499
VideoSpigot Cards Nubus/LC/IIsi	from $99*
Radius Spigot Power AV	$799

*With purchase of Adobe Premiere



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QMS Magicolor 600 dpi	only $2999
Radius Proof Positive Tabloid 220 Dye-Sublimation	$CALL
QMS ColorScript 210/230 Up to 11x17	from $1199
Tektronix Phaser 300i	$CALL
Tektronix 540 Plus color Laser	$CALL
STAR SJ-144MC 360 dpi Heat Fusion Printer	$199

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QMS PS2210/2220 from $999
- 20,000 page monthly duty cycle
- 22ppm • Dual-tray input

QMS 860 Hammerhead 600 -1200dpi from $1999
- 11 x 17 full bleed
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- 8ppm heavy-duty Canon engine
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(Mac and PC Ready)

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GCC SelectPress 1200x1200dpi	$4999

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QMS PS1700 for Macs and PCs from $1499
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Video Card	Platform	Monitor (Colors) 14/15"	16/17"	19/20"	21"
Radius FPD Card	Mac Plus	Mono	–	–	–
Radius Pivot Card	SE/30	256	–	–	–
Xceed Color 30hr	SE/30	256	256	256	256
Lapis Color 16	SE/30	Thousands	Thousands	256	256
Lapis Color 24	SE/30	Millions	Millions	256	256
Radius Direct Color/gx	IIsi	Millions	–	–	–
SuperMac Spectrum 8	IIsi	256	256	256	256
SuperMac Spectrum 8.24	IIsi	Millions	256	256	256

Video Card	Platform	Monitor (Colors) 14/15"	16/17"	19/20"	21"
Radius FPD Card	Mac SE	Mono	–	–	–
SuperMac Superview	Mac SE	–	–	Mono	–
Radius TPD Interface	Mac SE	–	–	–	Mono
RasterOps 8/LC	LC/PDS	–	–	256	–
SuperMac Spectrum 8	LC/PDS	256	256	256	256
Lapis Color 16 for LC	LC/PDS	Thousands	Thousands	256	256
Micro Conversions 1724	LC/PDS	Millions	Millions	256	256
Lapis Color 24 for LC	LC/PDS	Millions	Millions	256	256

Video Card	Platform	Monitor (Colors) 14/15"	16/17"	19/20"	21"
Double Color SX	Nubus	256	256	16	–
RasterOps 708+	Nubus	256	–	256	–
RasterOps 24L	Nubus	Millions	–	–	–
RasterOps 8/LC	Nubus	–	–	256	–
SuperMac Spectrum 8	Nubus	256	256	256	–
Double Color LX	Nubus	256	256	256	256
Radius Direct Color 24	Nubus	–	–	–	Millions
E-machines Futura MX	Nubus	Millions	Millions	Millions	–

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"Direct Connections provided excellent technical support." **MacWorld July'95**
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"This array is the one to beat." **Ken Grey** Writer for WIRED, Computer User, MovieMaker, Computer Video, and Digital Video Magazine.
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Seagate Hawk 2XL

- 2.1GB
- Ultra SCSI 3
- PRML
- Low profile
- Embedded Servo
- 5 yr warranty
- $ 620

5 YEAR WARRANTY

BRAND/MODEL	CAPACITY		ACCESS	RPM	INTERNAL	EXTERNAL
Hitachi 2.5" IDE***	810MB		14MS	5400	$ 339	
Hitachi 2.5" IDE***	1.0GIG		14MS	5400	$ 425	
Seagate ST51080N ***	1.2GIG	LP	12.5MS	5400		$ 360
Seagate Hawk 2XL***	1.2GIG	LP	9MS	5400		$ 469
IBM	2.1GIG		8.5MS	5400		$ 499
Conner CFP2107S	2.1GIG	LP	8MS	7200	$ 615	$ 685
Seagate 32155N	2.1GIG	Ultra SCSI	9MS	5400		$ 620
Seagate Barracuda 2	2.5GIG	LP	8MS	7200		$ 795
Seagate Barracuda 2W	2.5GIG	LP	8MS	7200		$ 865
IBM***	4.3GIG		8.5MS	7200		$ 1025
Fujitsu M2934S	4.2GIG	MR	8MS	7200	$ 975	$ 1045
Fujitsu M2934Wide	4.2GIG	MR	8MS	7200	$ 975	$ 1045
Seagate Barracuda 4	4.1GIG		8MS	7200		$ 1205
Seagate Barracuda 4W	4.1GIG		8MS	7200		$ 1325
Seagate Hawk4	4.3GIG		9MS	5400		$ 999
Seagate 14207N	4.2GIG		9MS	7200	$ 949	$ 1019
Conner CFP4207wide	4.2GIG		9MS	7200	$ 1099	$ 1199
Quantum Atlas	4.3GIG		8.6MS	7200	$ 999	$ 1069
Seagate Elite 9	9.0GIG		11MS	5400		$ 2195
Seagate Elite 9W	9.0GIG		11MS	5400		$ 2395

CD RECORDERS/PLAYERS

Ricoh 2 speed recorder / 4 speed player

1420

2MB Buffer

$899

The only CD Recorder in the industry with 2MB of Buffer to eliminate under-runs ! This is the Recorder that the Audio Community is using. You should too!

Includes Free software

MW ★★★★

Yamaha 4 speed Recorder / 4 Player	External	$ 1199
Yamaha 2 speed Recorder / 4 speed Player	External	$ 799
Yamaha 2x 4 Recorder with built in hard drive	External	$ 1229
Ricoh 2x 4 Recorder 512K buffer	External	$ 795
Pioneer 4 speed 18-Disc CD-ROM Changer	External	$ 1499
Philips 8 x speed CD Player	External	$ 325
Nakimichi 8 x 4-Disc CD-ROM Changer	External	$ 599
Panasonic 4x CD/650MB Optical	External	$ 499
150 Slot Jukebox with 4 players, all platforms	External	$ 14999
150 Slot Jukebox w/ CD Recording, all platforms	External	$ 16999
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"Stick with a vendor such as Direct Connections that understands how to prepare a RAID for desktop video." MacWorld April '95

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- 28mb/sec sustained sequential Writes.
  Tested with MacBench on PowerMac 9500.
  12GIG with 2 PCI accelerator cards $ 6999

From Hardware RAIDS to Software RAIDS, we'll show you how to configure the best system to meet your needs.

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Atto Express PCI MC	$ 695
Atto Express PCI SC	$ 315
Adaptec AHA-2940UW	$ 295
Adaptec AHA-3940UW	$ 355
SCSI Expander	$ 999

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External, Remus software, and cabling

- 4 GIG Fast and Wide Raid $ 2099
- 8 GIG Fast and Wide Raid $ 2599
- 16 GIG Fast and Wide RAID $ 5570
- 28 GIG Fast and Wide RAID $ 9199
- 40 GIG Fast and Wide RAID $ 14599

TARGA 2000 radius

OPTICAL DRIVES

2.6GIG Sony Optical for $1959 external including all cabling, and software!!

CAPACITY	MODEL	EXTERNAL
230MB	Fujitsu	$ 499
2.6GB	Hitachi	$ 1895
2.6GB	Sony 1MB cache	$ 1959
2.6GB	Sony 4MB cache	$ 2159
26GB	Sony Jukebox	$ 4695
52GB	Sony Jukebox	$ 6295

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We are the tape-backup Experts

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With 2.5MB/sec sustained transfer, the DLT2000XT is perfect for digital video or pre-press with large data files.

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30GIG

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CAPACITY	MODEL	MEDIA	INTERNAL	EXTERNAL
-8GIG	DC Travan	1/4"	$ 469	$ 559
-8GIG	DC8000	4MM	$ 839	$ 899
-8GIG	Sony 7000 DDS-2* MW ★★★★	4MM	$ 929	$ 999
-14GIG	Exabyte 8505XL	8MM	$ 2065	$ 2125
-14GIG	Exabyte 8700	8MM		$ 1575
-40GIG	Exabyte Mammoth	8MM		$ 5499
-30GIG	DLT2000XT	1/2"		$ 2799
-40GIG	DLT4000 MW ★★★★	1/2"		$ 4599
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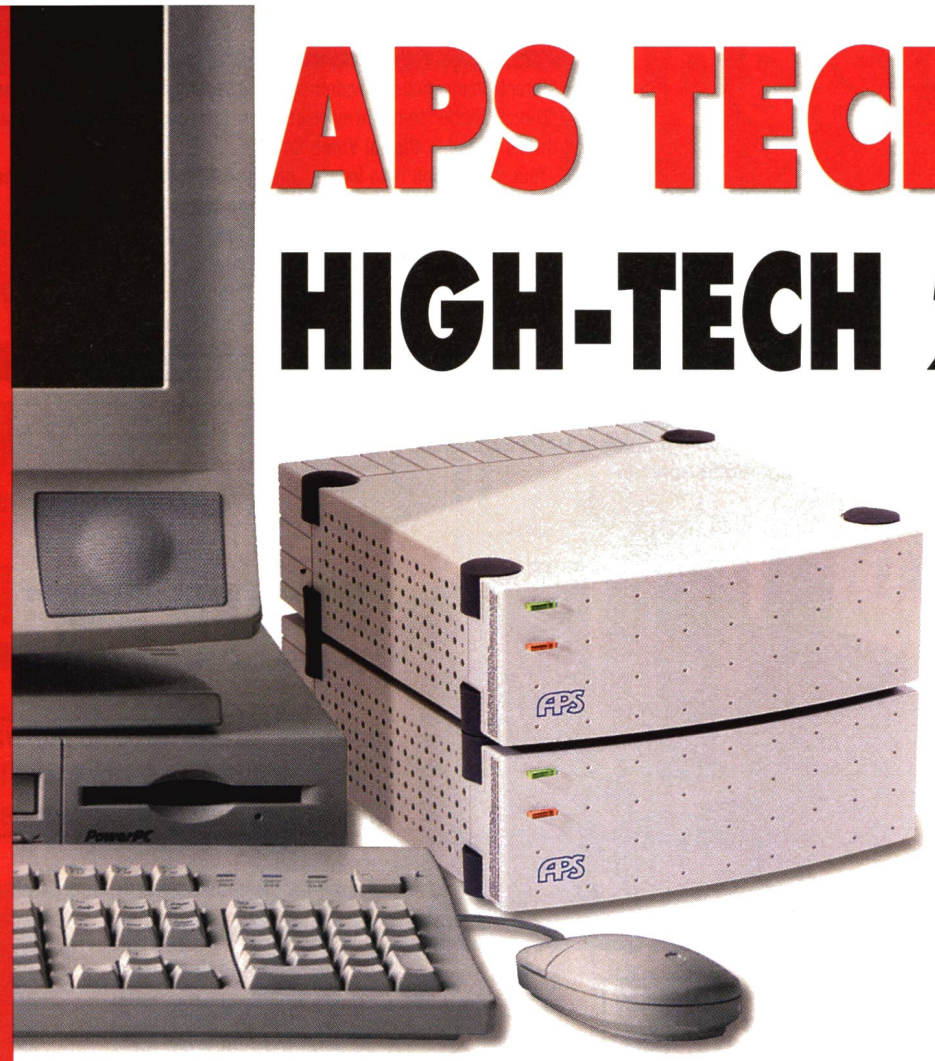

GREAT PRICE $399.95 Internal configuration

Quantum

APS Q 2100

- MR heads, PRML and Ultra SCSI Technology
- Exceptional value among 2GB drives
- Reliable 4500 rpm mechanism
- 3-year warranty

IC²E

POWER MATCHED FOR POWER PC

Give your Mac the extra storage space it needs by installing the new APS Q 2100. At only 20¢ per MB internal, the APS Q 2100 is the value leader in 2GB SCSI hard disk drives. Its performance is a great match with any application, and it is backed by a 3-year warranty.

3GB WINNER!

APS Q 3200

GREAT PRICE $499.95 Internal configuration

- 3GB for the price of 2GB
- 4500 rpm mechanism
- High-performance Ultra SCSI interface

Quantum

It's like getting an additional gigabyte for FREE. The new APS Q 3200 is priced lower than many 2GB SCSI drives, yet it delivers 3000MB of reliable storage. The drive uses MR heads and an advanced PRML read channel to fit its 3GB into a 3.5" low profile Ultra SCSI drive.

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NEW LIFE FOR SCSI POWERBOOKS!

APS I 1.2

$699.95 Internal configuration

- SCSI-2 interface
- Great for large applications
- Uses IBM's No-ID™ technology to increase capacity by reducing overhead

IBM.

The APS I 1.2 is a SCSI drive that's ideal for demanding spreadsheet, communication and graphics applications. At 4900 rpm, the drive gives you the performance you need from your PowerBook. Ideal upgrade for Blackbird (500) & Duo (200) series PowerBooks.

7200 RPM PERFORMANCE, 5400 PRICE!

APS MS 2000

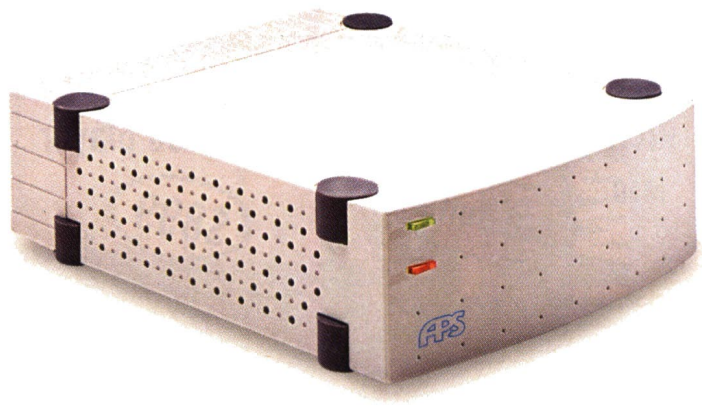
- 7.31MB/sec. sust. write, 4.54MB/sec. sust. read
- The best value for performance and capacity
- 5-year warranty

MacUser ZD LABS ★★★★

$399.95 Internal configuration

MICROPOLIS

IC²E



This incredible drive has the performance you would expect from a 7200 rpm mechanism but with a 5400 rpm drive price – and reliability! The APS MS 2000 formats to 2047MB, delivers sustained reads at up to 4.54MB/sec. and sustained writes at up to 7.31MB/sec, has an average access time of 20 ms and average seek of 9.6 ms.

APS SCSI DRIVES

Model	Capacity/Features	Internal	SR2000
APS Q 840 Quantum 840 Trailblazer	811MB 4500 rpm	$199.95	$259.95
APS Q 1280 Quantum Fireball TM	1222MB 4500 rpm	249.95	349.95
APS Q 2100 Quantum Fireball TM	2100MB 4500 rpm	399.95	499.95
APS Q 3200 Quantum Fireball TM	3200MB 4500 rpm	499.95	599.95

APS IDE DRIVES FOR MACINTOSH

Model	Capacity/Features	Internal
APS Q 1280A Quantum Fireball II 1280	1222MB 5400 rpm (Fast ATA-2)	$229.95

APS POWERBOOK DRIVES

Model	Capacity/Features	Internal
APS Q 1.08 Quantum Europa	1037MB 3800 rpm, IDE – Fast ATA-2	$399.95
APS I 1.2 IBM Travelstar DPRS-21215	1200MB 4900 rpm, SCSI-2	699.95

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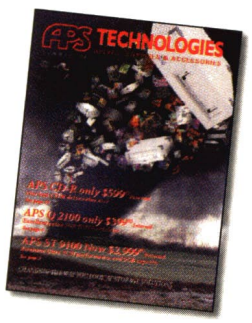

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- Internal hard drives include brackets, cables, cords and LEDs required for operation with the specified Macintosh where applicable. External SCSI-2 drives come with a premium SCSI cable, power cord and user guide.
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A radical new concept in drive mechanism climate control, APS exclusive IC²E system uses digital technology to sense heat build-up around the drive mechanism. Applying that information, IC²E controls a high-performance, super-efficient ball bearing fan subsystem to maintain mechanism temperature comfortably within the manufacturer's specified operating range. Should the mechanism exceed the specified operating temperature range, the intelligent IC²E circuitry provides a clear indication that a thermal problem exists. This approach drastically reduces cooling noise at low ambient temperatures, and improves both fan and drive mechanism life.

WHOA, WHAT A DEAL!

APS Q 4.0

$899.95 *Internal configuration*

- ✔ Advanced cache performance
- ✔ The perfect drive for servers
- ✔ 7200 rpm mechanism delivers high transfer rates
- ✔ 5-year warranty

Quantum

Using and embedded servo as well as a high-performance 7200 rpm Quantum Atlas mechanism, the APS Q 4.0 is equally at home with demanding AV and non-AV applications. The APS Q 4.0 also uses a huge 2MB cache to achieve sustained reads and writes of up to 4.45MB/sec. and 4.56MB/sec, respectively.

2 GIGS FOR THE AV PRO!

APS MS 2000AV

- ✔ Includes Micropolis' AV-Gold firmware
- ✔ Excellent mix of speed and reliability
- ✔ Outstanding value at its new, lower price
- ✔ 5-year warranty

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Combining data transfer rates as high as 4.71MB per second, Micropolis' acclaimed AV-Gold firmware, and excellent pricing the APS MS 2000AV is an excellent choice for demanding AV storage chores. This reliable 5400 rpm drive formats to just under 2GB and is backed by a five-year warranty.

4GB HIGH-PERFORMANCE AV

APS MS 4.0AV

JUST $999.95 *Internal configuration*

MICROPOLIS

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- ✔ Advanced cache management system
- ✔ Micropolis' acclaimed AV-GOLD firmware
- ✔ 5-year warranty

With sustained reads of over 4MB per second and sustained writes of over 4.73MB per second, the APS MS 4.0AV is the ideal entry to mid-level drive for AV use. Its thermal calibration helps prevent data stream interruption.

4GB FAST/WIDE PERFORMANCE CHAMP

APS MS 4.0W

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MICROPOLIS

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- ✔ Excellent for demanding graphic use
- ✔ Amazing 6.16MB/sec. reads & 13.70MB/sec. writes
- ✔ 5-year warranty

Remarkable speed is what you'll get with the APS MS 4.0W. Its 13.70MB/sec. sustained writes make it a perfect match for Photoshop, powerful graphics programs, large databases – really any disk-intensive application. The APS MS 4.0W is backed by a 5-year warranty.

BULK STORAGE, BULK PRICE - 9GB JUST

APS MS 9.0

$1799.95 *Internal configuration*

MICROPOLIS

- ✔ Best cost per MB in its class
- ✔ 8669MB formatted capacity
- ✔ Best performance & value in 9GB drives
- ✔ 5-year warranty

The high-capacity APS MS 9.0. formats to just under 9GB and has the lowest cost per MB in its class. It supports sustained reads of 3.55MB per second and writes of 5.82MB per second with an access time of 16 ms.

APS HIGH-PERFORMANCE SCSI DRIVES

Model	Capacity/Features	Awards	Internal	SR2000
APS I 2160 IBM Ultrastar ES	2063MB 5400 rpm		$399.95	$499.95
APS MS 2000 Micropolis 4421	2047MB 5400 rpm	LABS ★★★★	399.95	499.95
APS MS 2000AV Micropolis 4421AV	2047MB 5400 rpm		449.95	549.95
APS Q 4.0 Quantum Atlas XP34300	4101MB 7200 rpm	LABS ★★★★½	899.95	999.95
APS MS 4.0AV Micropolis 3243AV	4064MB 7200 rpm		999.95	1099.95

APS HIGH-PERFORMANCE SCSI DRIVES

Model	Capacity/Features	Awards	Internal	SR2000
APS MS 9000 Micropolis 3391	8669MB 7200 rpm		$1899.95	$1999.95
APS MS 9.0 Micropolis 1991	8669MB 5400 rpm		1799.95	1999.95*
APS MS 9000W Micropolis 3391W	8669MB 7200 rpm		1999.95	2099.95
APS MS9.0AV Micropolis 1991AV	8669MB 5400 rpm	LABS ★★★★	1899.95	2099.95*

APS FAST/WIDE SCSI DRIVES

Model	Capacity/Features	Internal	SR2000
APS MS 2.0W Micropolis 4221W	1955MB 7200 rpm	$649.95	$749.95
APS MS 2.0W AV Micropolis 4221WAV	1955MB 7200 rpm	749.95	849.95
APS MS 4.0W Micropolis 3243W	4064MB 7200 rpm	999.95	1099.95
APS MS 4.0W AV Micropolis 3243WAV	4064MB 7200 rpm	1099.95	1199.95

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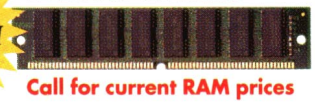

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APS Jaz

- ✔ Hard drive performance
- ✔ Huge 1GB capacity on removable media
- ✔ Choice of enclosure

Price includes one 1GB cartridge!

ICE *SR 2000 enclosure*

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540MB REMOVABLE SyQuest-COMPATIBLE

APS M540

GREAT PRICE **$299.95** *External configuration*

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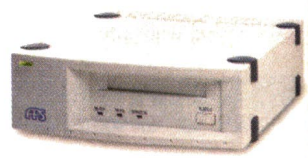
- ✔ Terrific removable media performance – sustained reads up to 3.04MB/sec. and a 9.9ms average seek

ICE POWER MATCHED FOR POWER PC

Attention graphics professionals and desktop publishers: you now have a high-capacity, high-performance removable disk alternative. The new APS M540 provides 540MB of storage on reliable, single-platter media and is capable of transfer rates of up to 2.68MB/sec. The APS M540 is also read/write compatible with your existing SyQuest 270 cartridges.

REALLY FAST BACKUP!

APS HyperDAT® Pro



- ✔ Fastest DAT tape drive available
- ✔ Backup at up to 50MB/minute!
- ✔ Up to 8GB of storage per 120m DAT tape
- ✔ Retrospect 3.0 backup software included

$999.95 *External configuration*

POWER MATCHED FOR POWER PC

With backup speeds as high as 50MB per minute, the APS HyperDAT Pro is the economical way to cut your backup (and restore) window in half. Ideal for server backups that require minimal downtime, the APS HyperDAT Pro uses standard 120m DDS-2 tapes which hold up to 8GB with compression*, and is compatible with all DDS and DDS-DC compliant tapes and mechanisms. **assumes 2:1 compression ratio*

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APS ProDAT®

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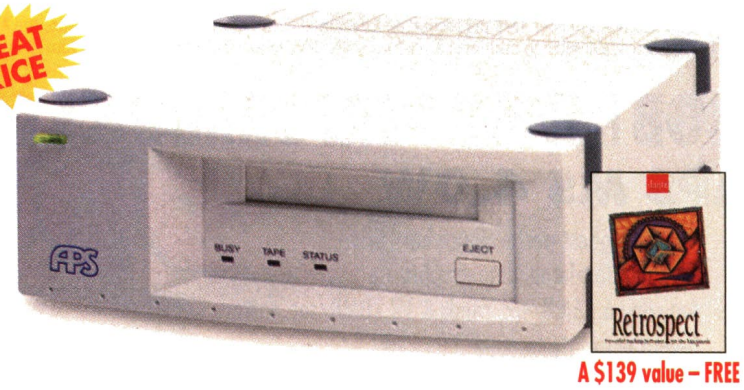

When a large uncompressed capacity and high speed is needed to handle backup chores for applications like digital video or multimedia, the APS ProDAT is the drive for you. Its 4GB capacity on standard 120m DDS-2 DAT tapes and backup speeds of up to 22MB per minute make the APS ProDAT the perfect drive for demanding backup needs.

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APS QIC & DAT TAPE BACKUP SYSTEMS

Model	Capacity/Features	Awards	Internal	SR2000
APS HyperQIC™ Travan 4 Mechanism	8GB	MacWeek, MacUser LABS 4½	N/A	$499.95
APS ProDAT® DDS-2 Mechanism	4GB		$649.95	699.95
APS HyperDAT® DDS-2 Compression Mechanism	8GB	Power Matched	849.95	899.95
APS HyperDAT® Pro DDS-2 High-Speed Mechanism	8GB	Power Matched	949.95	999.95

APS DLT TAPE BACKUP SYSTEMS

Model	Capacity/Features	Awards	Full-Height
APS DLT30 Digital Linear Tape Mechanism	30GB	Power Matched, MacUser Editors' Choice Award 1995 Finalist	$2999.95
APS DLT40 Digital Linear Tape Mechanism	40GB	Power Matched	4999.95
APS DLT4500 Digital Linear Tape Loader	200GB	Power Matched	8899.95

All APS tape drives include Retrospect® by Dantz®

APS REMOVABLES

Model	Capacity/Feature	Awards	SR1000	SR2000
APS SQ 5200 Compatible with 200, 88 and 44MB cartridges	194MB	MacWEEK, MacUser LABS 4½	N/A	$399.95
APS M540 Compatible with SyQuest 270 & EZ 135 cartridges	500MB	Power Matched	N/A	299.95
APS Jaz 1GB Jaz cartridges $99.95 ea.	1GB		$499.95	499.95

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- You may need to install system software appropriate to your machine before using our hard drives.
- Prices and specifications are subject to change without notice. Not responsible for typographical errors.
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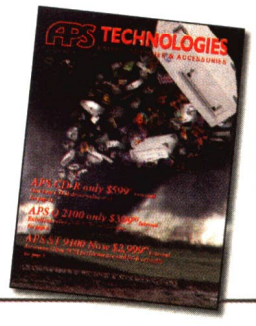

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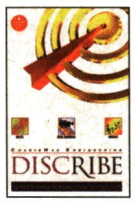

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- ✔ 115 ms average access
- ✔ Smooth video output

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APS CD8

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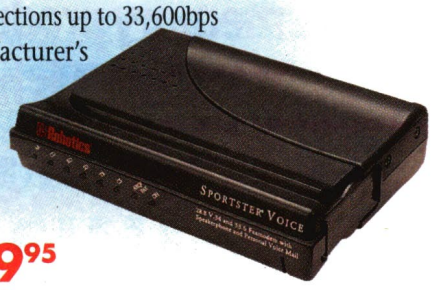

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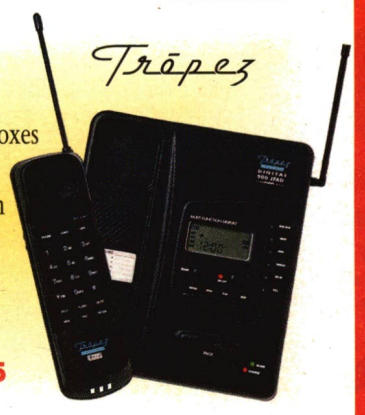

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APS CD DRIVES

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APS CD-R FREE Discribe CD recording software ($399 value)	Recordable CD-ROM	549.95*
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APS CD-R Pro FREE TOAST CD-ROM Pro recording software ($500 value)	4X4 Performance CD-R	1499.95**
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APS MO DRIVES

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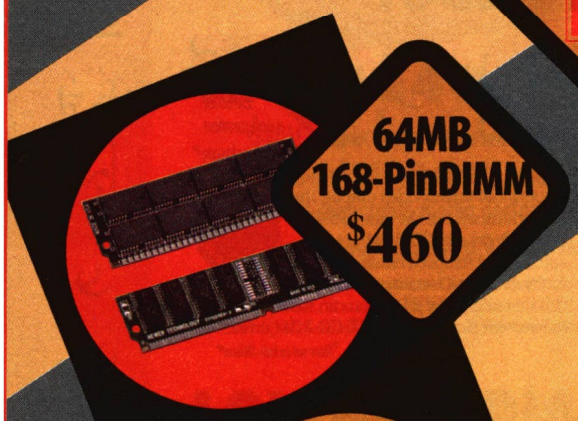

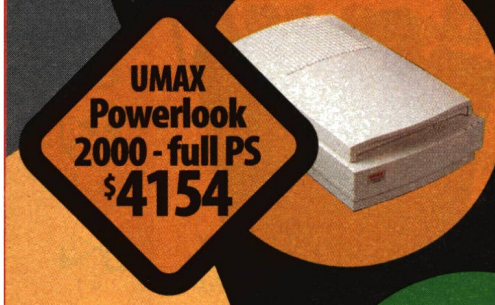

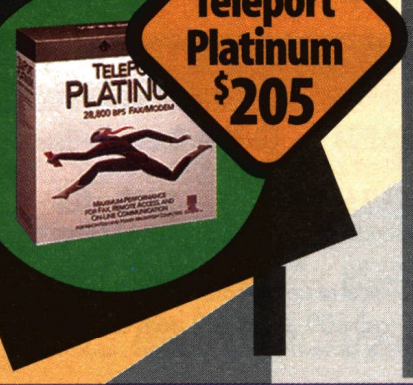

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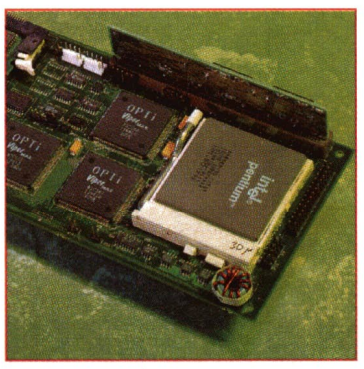

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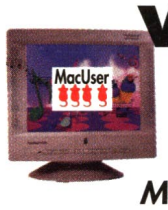

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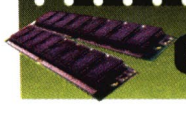

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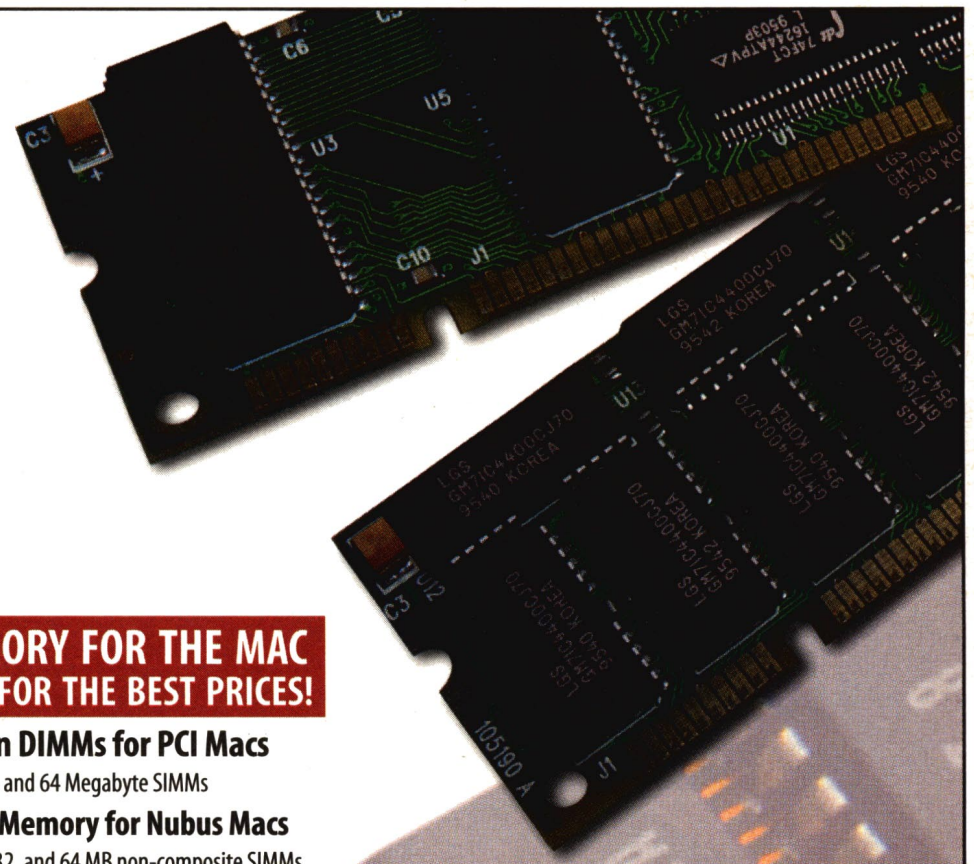

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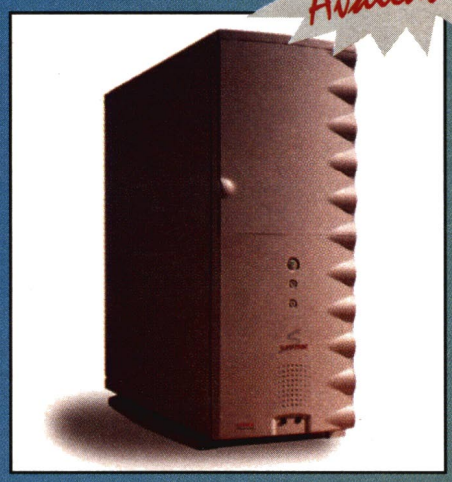

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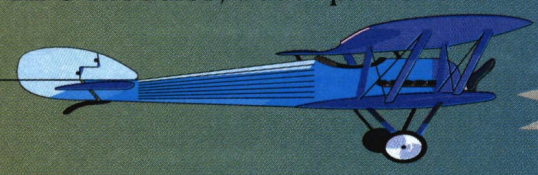

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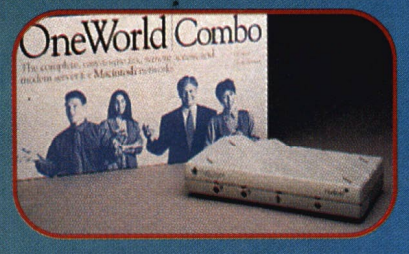

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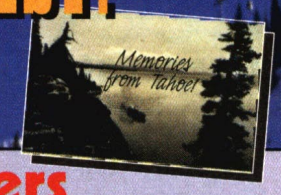

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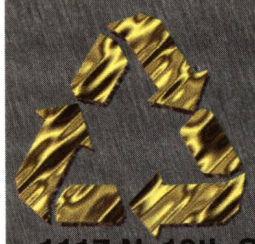

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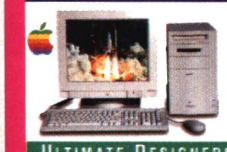

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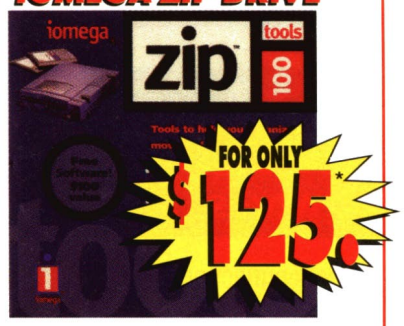

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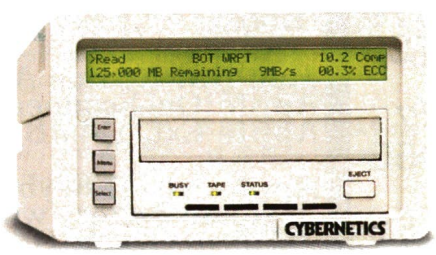

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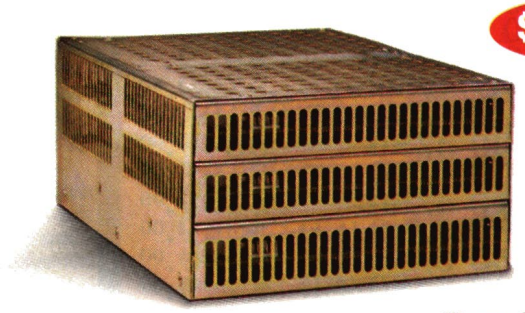

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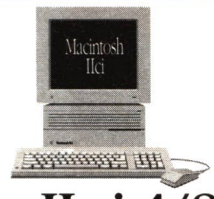

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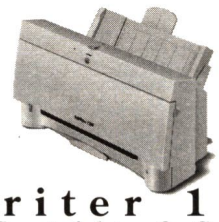

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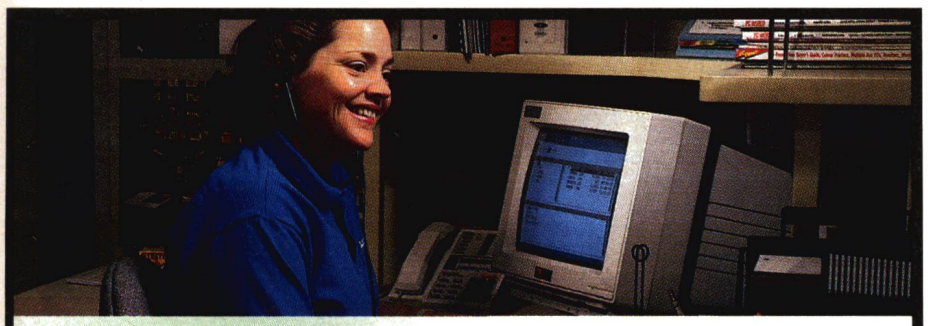

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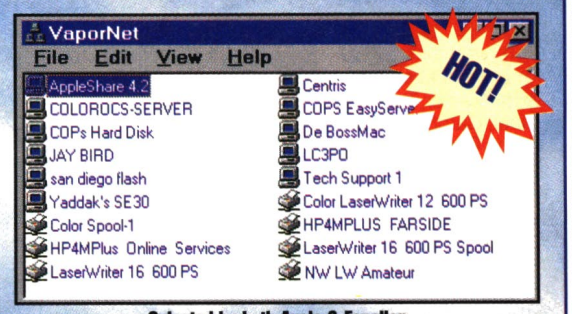

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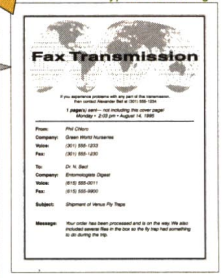

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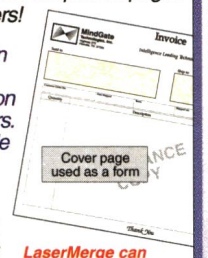

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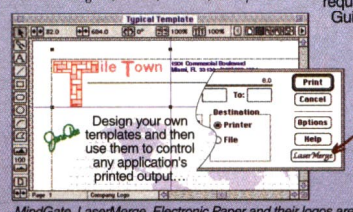

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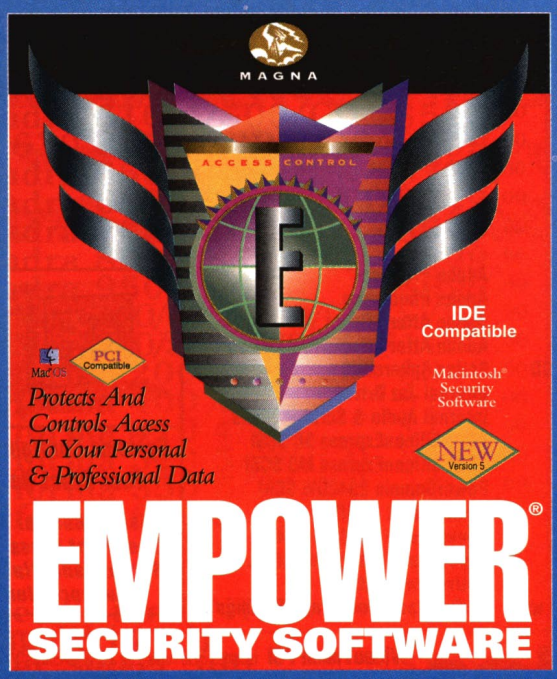

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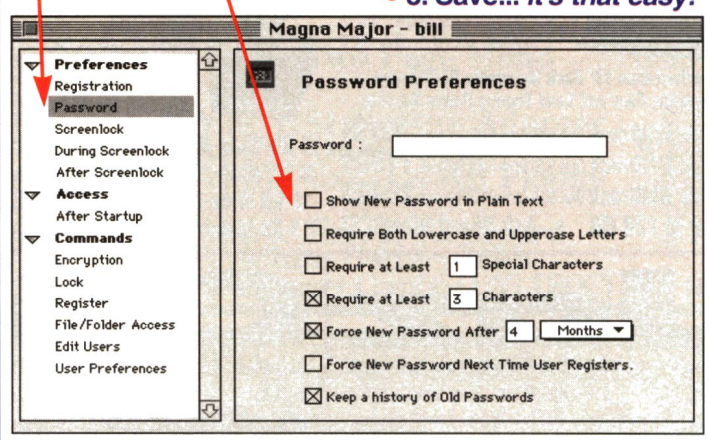

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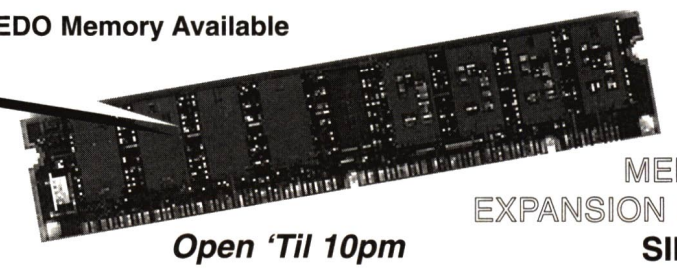

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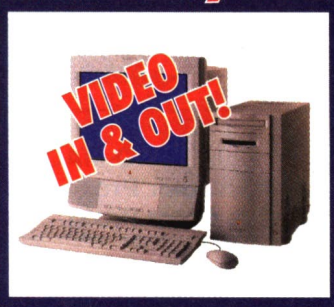

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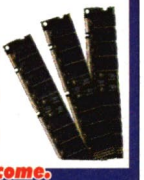

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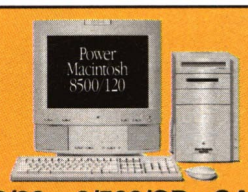

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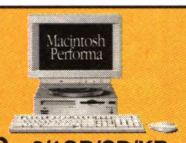

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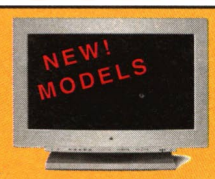

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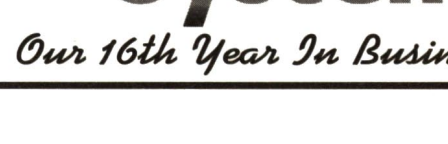

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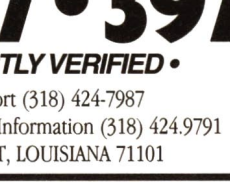

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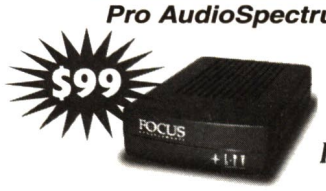

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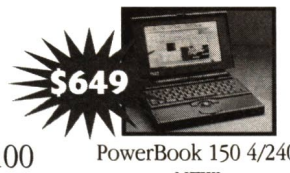

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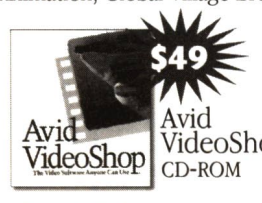

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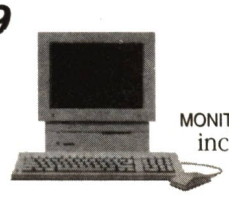

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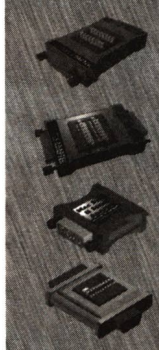

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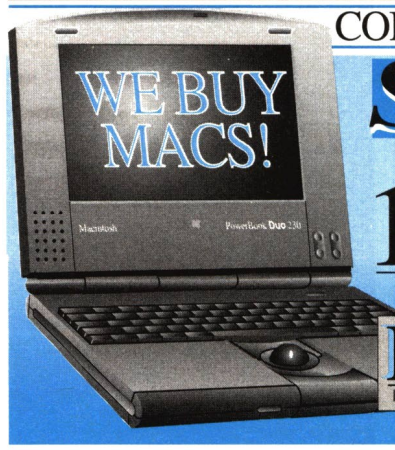

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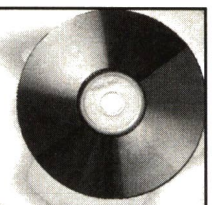

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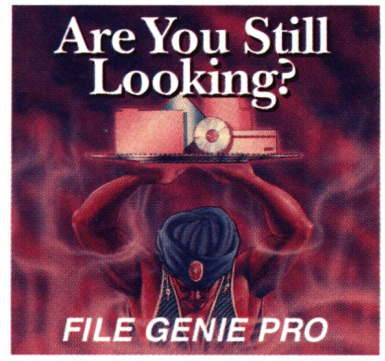

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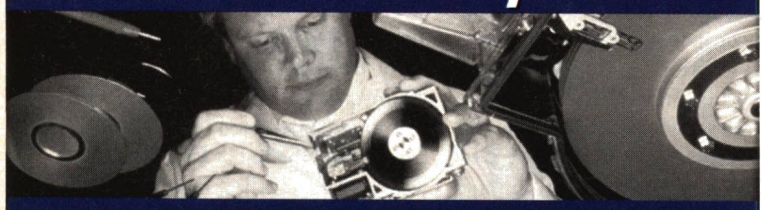

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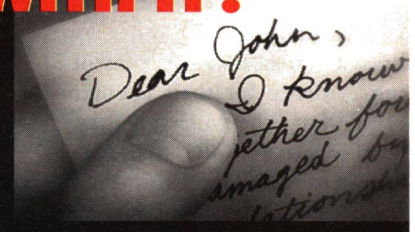

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NASA

From Page 1

year ago when, at the behest of Garman, JSC's Information Systems Directorate embarked on a program to eliminate "unnecessary diversity" by phasing out the 2,800 Macs that sit alongside the site's 7,500 Intel-standard PCs (see 02.12.96, Page 1). Mac advocates at the center protested the Windows-only policy from the start, arguing that they should be entitled to use the tools that enabled them to get their jobs done best and that the Windows standard had been adopted without the life-cycle cost studies required by federal and NASA regulations.

Since spring, activists have undertaken a stealthy but sophisticated effort to manipulate the levers of power within and around NASA to keep their Macs.

In March they presented their case to a member of the staff of U.S. Rep. Tom DeLay (R-Texas), a Houston-area congressman who is House majority whip. The following month, an aide to DeLay posed questions about the policy to a surprised NASA Administrator Daniel S. Goldin during a hearing of the House Appropriations Committee.

The Mac champions also took their grievance to a local representative of the agency's Office of the Inspector General, who eventually recommended that the OIG's Office of Inspections and Audits take up the case.

In May, Mac advocates sent Goldin and NASA's other top brass an anonymous fax presenting evidence for their counterclaim that "the Microsoft standard will cost MORE than what we are using today." Further, the fax said JSC's policy had been adopted without a cost-benefit analysis and that Garman had consistently demonstrated a bias toward Microsoft Corp. and its products.

In response to these pressures, the OIG in early June launched an inspection of JSC's technology-procurement policies. The inspector general sent a written request to NASA's chief information officer, Ronald S. West, asking that the replacement of Macs with PC compatibles be suspended pending completion of the review.

West did suspend PC replacements for a time, but the restriction was lifted in August to allow the purchase of 1,000 PCs. Macs are still available only after approval from Garman's office, and JSC has approved plans to purchase only 75 during 1996.

West subsequently distributed a letter throughout NASA noting that the agency had received "numerous complaints concerning the imposition of allegedly inappropriate standards for non-Unix desktop computing. These allegations, if true, raise questions about our compliance with federal laws and regulations," the letter said.

West also reiterated the long-standing policy that has made various NASA units major consumers of Mac as well as Wintel technology: "[T]he Agency consciously decided that it was in our best interest not to establish a single desktop computer operating system standard. ... Quite simply, we recognized that the diversity of our end users' requirements and applications necessitate that our IT architecture be flexible enough to adapt to and optimize their needs."

But the carefully worded letter left an opening for individual NASA centers, such as JSC, to implement narrower standards on their own, provided they were justified by cost-benefit studies that "take into consideration the full range of life-cycle support costs, comply with Agency standards, and consider end-users requirements and applications."

The letter was widely received as a rebuke to JSC's Garman, but no action has been taken to reverse JSC's move to Windows.

Last week Garman told MacWEEK: "Our policy is unchanged. We believe that a single, standard operating system for office automation systems is the most cost-effective approach for this center."

The Mac camp is hoping, however, that the inspector general's examination could produce dramatic change. The final report, originally expected in July, has been postponed several times and is now due in mid-September. Sources said that officials involved in the inspection have been deluged with documents and testimony from more than 100 JSC employees.

In the interim, Mac advocates continue to press their case. They took the issue to Ron Regan, reporter for an occasional news feature called "Whistle Blower" on local television station KPRC, Houston's NBC affiliate. Regan reported on the JSC controversy Aug. 1, focusing on the argument that the cost of conversion to Windows "could mean big bucks for taxpayers."

The TV report also included excerpts from a 1995 advertisement in which Microsoft thanked Garman by name for his help with testing Windows 95. Critics again accused the CIO of uncritically favoring Microsoft products over competing desktop and network solutions.

In addition to Windows 95, he has made Microsoft Office the centerpiece of JSC's "standard load" for office automation, and over the past year the center has moved its mail system to Microsoft Exchange and adopted Windows NT for many of its application servers.

Even if the upcoming OIG report is critical of Garman's policies and procedures — as most JSC sources expect — it will not by itself produce a change because the OIG has no enforcement powers.

But Mac supporters said they are optimistic that a change is in the wind. "We are confident," one source said, "that once this material is digested, the policy will be overturned and corrective action taken."

Garman and his supporters frequently accuse Mac advocates of "emotionalism," one of them said. But he continued, "We are going to win this, not based upon emotions, but based upon studies and data collected at JSC over the years. Data, studies, figures, facts — nothing more, nothing less." □

Persuasion

From Page 1

new unified-interface strategy. Menus, dialog boxes, palettes and keyboard shortcuts will more closely resemble those of Adobe Photoshop and Illustrator.

Web authoring via Adobe Acrobat, not HTML, will be a key part of the new Persuasion (see story below). Web-focused users will be able to incorporate hyperlinks, movies, sounds and graphic elements within presentations, then export them as Portable Document Format (PDF) files using the bundled Acrobat Distiller 3.0 software.

According to Adobe, PDF presentations can be launched with any browser that supports PDF, including Netscape Navigator and Microsoft Internet Explorer, and played back with anti-aliased text on virtually any platform, including DOS; Windows 3.1, 95 or NT; or Mac OS systems.

Users will be able to add URLs to their presentations by dragging them from a Web browser onto a slide. The software will preserve links to URLs when saving presentations to PDF, Adobe said.

"We'll be able to tailor presentations to the Internet," said beta tester Alan Halpern, president of Graphic Presentation Services of Santa Monica, Calif. "Our clients can put presentations onto the Internet without a lot of ballyhoo."

Drag-and-drop capabilities play a major role in Adobe's interface integration strategy. Persuasion 4.0 will let users drag and drop graphics files in EPS, TIFF, PICT, JPEG, GIF, Illustrator or Photoshop format. Photoshop files will retain their layers, and Illustrator files will keep their full color and resolution.

A new Links dialog box will keep track of any linked graphics or sound files required for a presentation. Links can be updated or deleted, and graphics can be stored either with the presentation or separately.

The new Persuasion will also keep track of fonts. A dialog box will let users identify and change fonts used throughout a presentation. The font dialog box is a "feature I'm going to like in our business," Halpern said.

"You can open up a document and it will tell you what fonts are missing. Persuasion doesn't do that currently. Clients say, 'Font? What's a font?' and we end up having to mess around with their files."

Persuasion 4.0 will offer enhanced cross-platform capabilities. In fact, Adobe plans to ship both a Mac and Windows version in each retail box. Users can edit and use presentations created on either platform, Adobe said, and Persuasion will automatically convert most media formats between platforms.

Competitor Microsoft Corp. has gained market share by widely bundling its PowerPoint presentation package with its Microsoft Office suite. To woo PowerPoint users, Adobe will include a conversion utility for PowerPoint files. The utility will also be capable of batch conversions of PowerPoint files.

"It's about time they went after PowerPoint," said Halpern, who has standardized his business on Persuasion. "People are using it because they got it for free. Persuasion does dances around it; conversion will be a pleasure."

Other enhancements will include an eyedropper tool; variable-speed transitions; customizable templates for bulleted text, predesigned buttons and text animation; a new cropping tool; and an enhanced Nudge palette.

Persuasion 4.0 will have a list price of $395; upgrades will be $129 for owners of previous versions. Owners of any version of PowerPoint will be able to purchase Persuasion 4.0 for $129.

Adobe Systems Inc. of Mountain View, Calif., can be reached at (415) 961-4400 or (800) 833-6687; fax (415) 961-3769; http://www.adobe.com. □

Web Presenter may not stand alone

Some of the new features adorning Persuasion 4.0 are borrowed from its predecessor, Web Presenter. However, the prototypic Web presentation software may never make it to the ball.

When it demonstrated the technology in May, Adobe Systems Inc. billed Web Presenter as an upcoming technology that would let users create slide shows with high-resolution graphics, QuickTime movies, sounds and embedded hyperlinks and then publish them over the Web using Adobe Acrobat's Portable Document Format.

Many features in Persuasion 4.0 are built on the same underlying code as Web Presenter, Adobe said, including direct importing of Illustrator or Photoshop files, layer support, the capability to drag and drop links from Navigator, and exporting directly to PDF with links intact (see story, Page 1).

The release of Version 4.0 may doom Web Presenter to the dust bin of history.

Kevin L. Wandryk, director of product management with Adobe's Internet division, said, "An underlying question may be whether or not there's going to be a future for the Web Presenter as a stand-alone technology."

The company said it is analyzing feedback from customers who downloaded the Web Presenter demo, which was posted on Adobe's Web site in May, to decide whether to turn the technology into a bona fide product for creating Web presentations. "That's something we're actually working on trying to figure out right now," Wandryk said.

— By Rebecca Gulick

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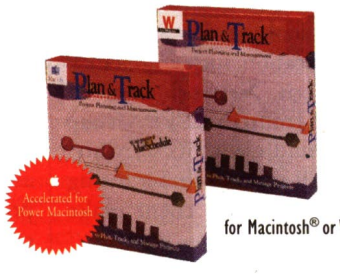

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QuickMail

From Page 1

nounced a QuickMail-branded POP 3 server (it said it will license an existing one in the future), Development Version 10 of the QuickMail Pro client we tested is very stable and promises to free users from the fetters of LAN-based QuickMail systems. QuickMail Pro will cost $69.95 for one license.

CE said the current, LAN-based QuickMail 3.6 will continue to develop as a separate product, but that QuickMail Pro 1 will not have an AppleTalk connection back to QuickMail 3.6's proprietary servers. Therefore, there will be no link between the LAN-based QuickMail account and the POP, Internet-based QuickMail Pro.

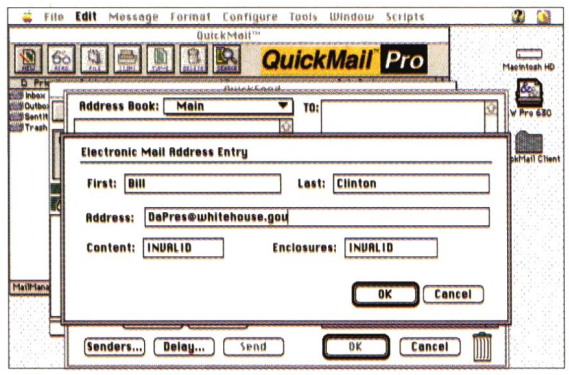
Owners of QuickMail LAN will receive a discount on the purchase of QuickMail Pro. Discount amounts haven't yet been announced.

Same thing, only different

Overall, QuickMail Pro works and acts like QuickMail 3.6, with two major adjustments: It can now gather mail in the background, and it no longer supports server-based rules for redirecting or otherwise managing mail as it enters the system. However, QuickMail 3.6's client-controlled, rules-based mail filtering system remains in QuickMail Pro without change and, like its predecessor, it is limited in that it doesn't allow If, Or or And statements. Customizable Address Books remain the same, but are converted from QuickMail 3.6 format upon installation, as are all forms, folders, and filed messages and enclosures. QuickMail 3.6 can't read files converted to QuickMail Pro format.

As with QuickMail 3.6, several users can run the QuickMail Pro application on one Mac, yet still have the privacy of receiving their own mail and managing their own accounts. Support of such standard Mac OS features as Macintosh Drag and Drop will continue in QuickMail Pro.

CE is looking for a suitable PPP application, such as MacPPP from Merit Network Inc. or FreePPP from FreePPP Group Inc., to bundle with its software. This will help those using the QuickMail 3.6 client make the transition to an Internet-based mail system.



When you set up recipient information in CE Software's QuickMail Pro, you can specify the target platform, and mailed files will be packaged for that platform.

The user experience

One common complaint of QuickMail LAN users is that QuickMail 3.6 doesn't gather new mail until the application is front-most. In QuickMail Pro, the QuickMail Hub application runs in the background and gathers e-mail at predetermined times, so new mail is available as soon as you've been notified of its presence.

QuickMail Pro's capability to include attachments goes beyond that of products such as Eudora from Qualcomm Inc. You can attach both sound and Mac Clipboard attachments as well as standard file attachments. QuickMail Pro also supports file encoding using AppleSingle, AppleDouble and other formats, as well as full MIME (Multipurpose Internet Mail Extensions) compliance.

Building on its proprietary forms technology, QuickMail Pro forms are interchangeable among Windows, Mac, LAN and Internet applications as MIME attachments, encoded in a proprietary format. The program's capability to send MIME-encoded formatted text means that such text will appear correctly when received by any other MIME-compliant client, such as Eudora. While CE has clearly started to work on this feature, it didn't function correctly on the version we tested.

One nice thing about QuickMail Pro's folder system is that the main window shows all mail folders in one view. While the structure doesn't allow hierarchical folders as Eudora does, you can open or close folders by double-clicking them, much like you can in Notes from Lotus Development Corp. You can file mail either by selecting the folder from a pop-up menu or by dragging files from one folder location to another. Having everything in one window is convenient if you have a smaller screen or a PowerBook.

Server options and security

Our QuickMail Pro beta couldn't create global settings to retrieve messages from the mail server or to leave them on the server for a period of time. CE said those options will be available in the final version. Also, the beta version didn't support any type of authentication besides QuickMail's password authentication. CE said the shipping version will support Authenticated POP, a simple password-encoding scheme.

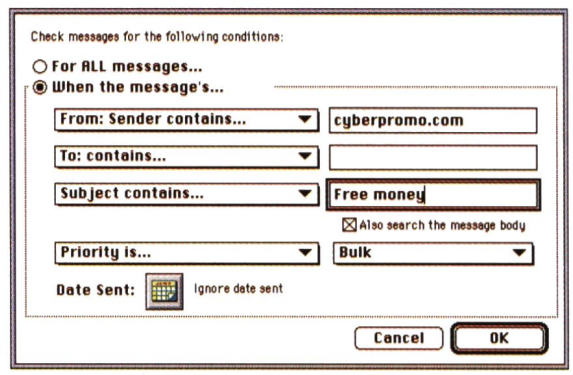
The company said it's making its API suite available to third parties to allow them to develop such lesser-used tools as Finger and Ph. It plans to provide additional directory access plug-ins to replace the proprietary name server used in QuickMail 3.6 and possibly for Lightweight Directory Access Protocol (LDAP) directory services applications.

Conclusions

Those who like QuickMail 3.6 but also need Internet-based e-mail access will probably like QuickMail Pro. While it does lose its server-based message-filtering rules, it keeps many of the features that made QuickMail 3.6 great, such as forms, address books, multiple-user clients and spell checking. Some features, such as mail notification, are getting better while others that need improvement, such as client-controlled mail filtering, are staying the same.

But such criticisms pale against the fact that QuickMail Pro will be a full member of the Internet e-mail community. And those QuickMail 3.6 users who care to join the community will find an easy transition to QuickMail Pro.

CE Software Inc. of West Des Moines, Iowa, can be reached at (515) 221-1801 or (800) 523-7638; fax (515) 221-1806; ce_sales@cesoft.com; http://www.cesoft.com. □



QuickMail Pro could use improvement in its client-controlled message-handling rules. As in QuickMail 3.6, rules involving logical operators are impossible.

Users sound off on QuickMail strategy.
See Page 18.

Netscape

From Page 1

upgraded to Version 1.5 this month (see 08.19.96, Page 20). First introduced in February 1995, QuickTime Conferencing is a Mac OS extension that lets users participate in conferences and share data.

CoolTalk for Mac will let users make phone calls by clicking on Web links in a mechanism called the 411 Directory. The product will provide full-duplex sound and offer a speed dialer, call-screening features and a mute button. Users will be able to locate one another via Netscape's online CoolTalk phone book, available at http://live.netscape.com. Sources said the Mac version of CoolTalk will be fully compatible with CoolTalk on other platforms.

Users will download CoolTalk as an addition to Navigator. The product will reportedly install and configure the QuickTime Conference extension and the CoolTalk helper application. In addition, sources said Netscape this fall will release a developers tool kit for creating distributed applications — such as games or file transfer tools — for use with CoolTalk.

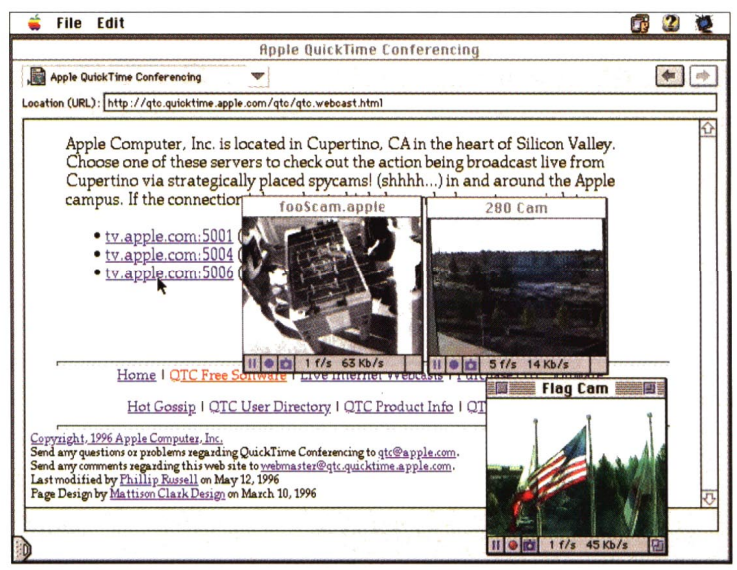
According to sources, CoolTalk deployment on the Mac was delayed because the technology was originally developed by InSoft Inc. of Mechanicsburg, Pa., which Mountain View, Calif.-based Netscape acquired in January. InSoft had only Windows and Unix versions of CoolTalk, and Netscape asked Apple for help in implementing a Mac solution. Apple has reportedly integrated InSoft's proprietary protocols within QuickTime Conferencing for CoolTalk.

In addition to CoolTalk, Apple is working on a QuickTime Conferencing-derived product that debuted with the company's event Webcast. QuickTime TV is a single-direction, one-to-many audio and video broadcasting system that is scalable and will support far more users than QuickTime Conferencing's normal peer-to-peer-based sharing. Apple has already released a client version of QuickTime TV, and sources said the company is working on a full QuickTime TV package.

The bundle is expected to comprise a Mac-based broadcaster, a Unix-based reflector and the Mac QuickTime TV client. Instead of broadcasting separate data streams to each user, thereby increasing the server's load, the QuickTime TV reflector will stream video from one reflector to several clients using IP Multicasting.

The QuickTime TV client will reportedly be an application that can be used either in conjunction with a Web browser or alone. While a version of the client is currently available on Apple's Web site (http://qtc.quicktime.apple.com), sources said the final package won't arrive until sometime in 1997.

Apple and Netscape declined to comment. □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Last modified by Phillip Russell on May 12, 1996
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The client version of QuickTime TV is on the Web, and Apple is reportedly developing other components based on its QuickTime Conferencing technology.

David Morgenstern contributed to this report.

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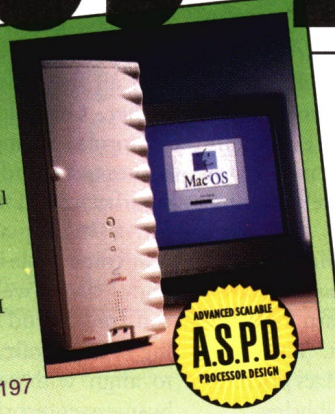

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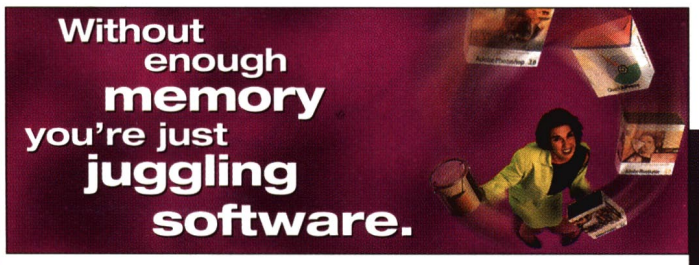

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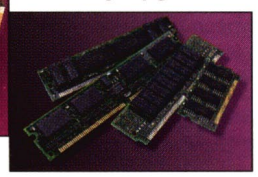

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NEWSMAKER

Guglielmi preps Motorola CPUs

First PPCP boxes won't be cheap

By Stephen Howard

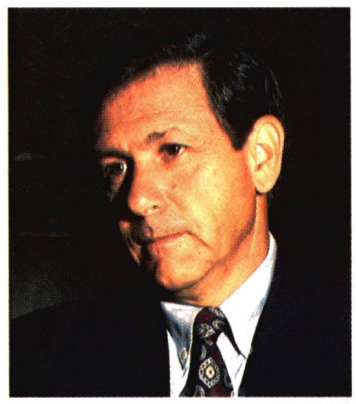
PowerPC chip maker Motorola Inc. is moving on twin tracks. The company this fall expects to release its first Mac OS systems, followed closely by PowerPC Platform machines. Joe Guglielmi, vice president and general manager of the Tempe, Ariz.-based Motorola Computer Group, has a foot planted on each path.

MacWEEK spoke to Guglielmi about Motorola's product plans, upcoming Mac OS-only designs and its PowerPC Platform, or PPCP, customers.

"We don't see today — [though] we could all be proven wrong — a world where everybody wants to boot up [Windows] NT one day and boot up Mac the next day," Guglielmi said.

Instead, PPCP's signature capability to run multiple OSes gives enterprise customers more freedom to configure one system for different users. Compared with current Intel-standard PCs or Macs, PPCP hardware will be "a more fungible asset — the asset can be moved around," he said.

And it's not customers alone who gain from this flexibility,



BOB HOUSER

Vice President Joe Guglielmi runs the Motorola Computer Group.

Guglielmi said. Having one machine that can be sold for different OSes will reduce Motorola's manufacturing costs. "I can actually develop a product line that can be customized at the back end of my manufacture/development cycle," he said. Likewise, computer stores in the retail channel will be able to configure a multi-OS PowerPC machine based on what is selling. "You can actually customize it at the channel level by taking shrink-wrap software and loading it on those boxes," he said.

At the start, this freedom of choice will be PPCP's best feature. "It may not be the lowest-cost initially because we have the transition from the current environment, which has both Mac-specific I/O and other I/O on the same design," Guglielmi said. However, he said, Motorola does see economies of scale eventually driving down the prices for PPCP chip sets as well as complete systems.

In the company's Mac OS-only systems due before year-end, however, Motorola will push for lower prices from the start. The company is shooting for Macs priced at about $1,500 and possibly less.

Guglielmi said, "Motorola believes that it is very important to take the entry-level price of the Mac and move it down more into what I call the Intel-volume price range, with competitive performance and feature-function capacity."

Guglielmi predicted that Motorola will achieve lower costs though better engineering, larger production capacity and foreign plants. "We think the [Apple Mac] design derivative that we're working on has been pushed further in the low-cost design area than some of our other competitors," he said.

"Secondly, in Motorola Computer Group today, I have an in-house, in-line manufacturing capability that produces hundreds of thousands of boards today," Guglielmi added. "Thirdly, as we begin rolling this out, I'm going to use the joint venture I started in the fourth quarter in China, which we call Nanjing Power Computer. It's a Motorola-Panda Electronics joint venture to do a substantial amount of the system assembly and testing for Chinese markets, the Japanese market, European market."

If all these elements come together, Guglielmi said, he sees Motorola selling enough machines to expand the Mac market significantly. "I think the demand for a high-quality, high-value Mac compatible is extraordinarily high, [so] we'll be supply-constrained and we'll end up trying to target our channel strategy to align with our focus on the business-enterprise user," he said.

These Mac OS systems aimed at business will benefit from Motorola's experience with Windows NT, he said. "We're going to work hard on trying to add value in making sure that Mac OS clients and NT server environment [are] as efficient as [they] can be," Guglielmi said. "We believe that over time, not initially, there are opportunities to add capabilities to both sides of that equation that will make the Mac a more attractive client in a mixed Mac-NT environment.

"We think we're uniquely positioned to be focused on the business Mac-NT market segment in a way that almost no one else can," Guglielmi said.

As a supplier of Mac board and system designs to other companies, Motorola is finding "a very high level of interest" for Mac-based embedded systems and for Motorola-built OEM Macs. "That's really a time-to-market thought, where people want to customize a product for selected local markets, primarily in the European theater," Guglielmi said. "And these are people who are known to have their own brand equity and want to keep their brand equity."

In the United States, however, interest is stronger in boxes with a Motorola logo made famous through consumer electronics. According to Guglielmi, "[It's] 80/20 in the U.S.: 80 percent is interest in Motorola-branded product because of the brand recognition." □

Channel

From Page 1

the company's supply policies.

"The big mail-order guys can buy up all the inventory of a model and then demand any price they want," said Tom Santos, owner of MACadam Computer Inc. of San Francisco, who attended the sales meeting. "This hurts the entire channel."

According to Abrams, Apple will seek to balance the needs of its volume-based resellers with those of smaller, Mac-centric dealers. "The main problem has been that we confused volume attributes with value attributes," she said. "Both are critically important but are definitely not synonymous."

While volume distributors — those who move 10,000 or more units per month — remain a critical link, Abrams said the smaller vendors usually provide education to users about new technologies.

Larry Moon, a partner in Dy-No Computers Inc. of Pasadena, Calif., said Apple's handling of the recent 5300-series PowerBook recall hurt small dealers. "We sent all our units back with the understanding that Apple would replace them, but they didn't," Moon said. "They shipped what they had to the major accounts. ... That took away about 20 percent of our business."

Abrams said these stories were not lost on Apple. "The purpose of this entire program is to level the playing field between these two camps," she said. She also said the company is currently renegotiating contracts.

Another aspect in flux is Apple's dealer rebate policy. In Australia, which industry insiders say often serves as a test market for new Apple strategies, Apple Australia this month told dealers that "soft money" rebates will be discontinued for stores that sell both Apple and clone systems.

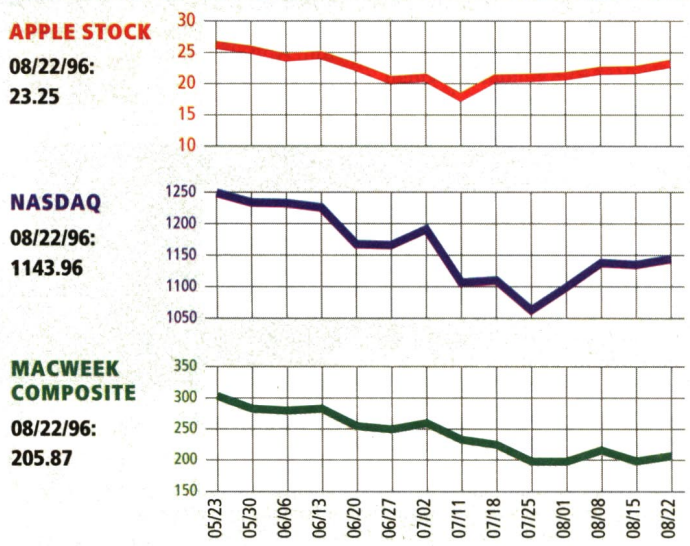
A spokeswoman for Apple Australia said Power Computing Corp. clones sold by Mitsui Computer Ltd. were hurting Apple's sales in higher-education and publications markets. A spokesman for Apple Americas said that while plans for adopting these strategies in the United States are not yet final, such moves are designed to recognize and support dealers that support genuine Apple products.

Also in Australia, the company is trying another new channel strategy: Apple-owned retail outlets. Apple Australia said its aim is to make computer shopping less intimidating and confusing than the current retail model.

Back in the United States, Apple in June combined its higher-education division with the company's enterprise division, which will reduce confusion and improve the sales infrastructure for universities, Abrams said. The direct K-12 education channel will remain unchanged.

Co-marketing is an area where Apple will be more aggressive, said Abrams, who noted K-12 dealers' requests to present "a smorgasbord of third-party offerings." Additionally, she said the company is preparing four new bundling deals for the upcoming holiday season. □

StockWatch



	08.22.96 CLOSE	WEEKLY CHANGE
Apple	23.25	1.00
MacWEEK Composite*	205.87	8.47
SOFTWARE DEVELOPERS		
Adobe	35.75	2.75
Caere	9.75	-0.13
CE Software	1.50	0.25
Fractal	11.25	-0.38
Graphsoft	6.63	-0.75
Insignia	7.25	0.19
Intuit	39.50	1.25
Macromedia	22.50	1.13
Microsoft	125.00	-0.13
Novell	11.88	0.38
Oracle	38.13	-1.75
Symantec	10.63	0.25
STORAGE		
Iomega	15.19	-0.69
Pinnacle	6.88	0.38
Quantum	16.00	1.88
Seagate	55.13	2.75
SyQuest	6.31	-0.06

	08.22.96 CLOSE	WEEKLY CHANGE
PERIPHERALS VENDORS		
AmeriQuest	0.63	0.00
Asanté	6.00	0.38
Focus	2.25	-0.19
Global Village	7.56	0.56
HP	43.00	-0.50
QMS	5.63	0.13
Radius	1.44	0.19
Shiva	47.31	1.31
Tektronix	40.00	1.00
Truevision	5.00	-0.13
DISTRIBUTORS		
CompUSA	41.50	-0.88
IE	7.13	-0.38
Merisel	2.44	-0.06
Tech Data	24.38	-0.75
INDUSTRY INDICATORS		
Compaq	57.88	0.13
IBM	112.63	1.75
Intel	83.00	1.25
Motorola	55.13	-0.63
SGI	24.00	1.00
NASDAQ	1143.96	9.27

**The MacWEEK Composite is calculated by adding the stock prices of the following companies: Apple, Adobe, Asanté, Caere, CE Software, Global Village, Intuit, Macromedia, Radius, Shiva, SyQuest and Truevision. Source: Nordby International Inc.*

PPCP

From Page 1

PPCP, systems, will boost confidence for potential Mac OS licensees (see 06.24.96, Page 1).

According to Mike Bell, PPCP product manager for Apple's licensing group, the final License Release may offer components of the upcoming system update, code-named Harmony. However, sources said the feature set of the initial PPCP release will depend on when each version reaches golden master stage.

Bell said LR1 comes with a Macintosh Communications Toolbox tool that lets unmodified applications use common I/O features of Intel-standard PCs, such as parallel ports for printing and dedicated hardware handshaking with RS-232 serial ports.

Both Motorola Computer Group of Tempe, Ariz., and IBM Corp.'s Microelectronics Division om East Fishkill, N.Y., this summer demonstrated earlier versions of the Mac OS and Windows NT booting from PPCP prototypes. IBM used its Long Trail licensing design, while Motorola used a prototype code-named Viper. Contrary to published reports, Motorola said it will use a different licensing design that will be unveiled at November's Comdex/Fall '96 in Las Vegas.

The PPCP systems will work with a PowerPC version of Windows NT 4.0, according to Jeff Nutt, PPCP program manager with Motorola Inc.'s Microprocessor Division in Austin, Texas. "We don't have to change [Windows NT's] kernel or the platform, only modifications in its hardware abstraction layer," Nutt said. "NT is not an issue."

In addition, Nutt said he expects several vendors to announce and demonstrate new PPCP products at Comdex.

While encouraged by progress on the OS front, several industry insiders said they were concerned by Apple's recent delay of branded PPCP products until the second half of 1997 (see 08.12.96, Page 1). "Clearly Apple is on the hot seat," one vendor said. "We've got to have Apple in the slot to be successful."

Others were more forgiving of the delay. "As a logic supplier, we'd like the highest volume to drive costs down," said Runbir Singh, director of PPCP business for San Jose, Calif.-based VLSI Technology Inc., which is supplying some logic chip sets. "But it's a realistic time for them to introduce products. Their cycles are longer than [that of] clone manufacturers." □

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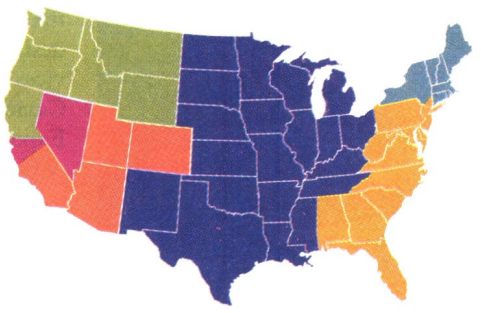

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21st-century schizoid Mac

Mac the Knife feels duty-bound to preface this week's column with a startling confession: Despite his weighty industry credentials, he's more of an aesthete than a technologist.

Like most of his colleagues in the trade press, he feels his true calling is as *artiste manqué*, drawn more by the bright shinies on the outside of the box than by all those tedious specifications that go under the hood. However, like temperamental artists from Antonin Artaud to LeRoy Neiman, the Knife jealously guards his franchise as a trendsetter. He was therefore inclined to scoff when another Mac publication put its own home-brewed future-Mac-cum-bath-toy on the cover of its September issue.

Hail, Spartacus

Now the Knife is gratified to learn that the competition's vision for the future is as myopic as he had hoped. In fact, Apple's own high-design concepts, while equally goofy, seem to have far more in common with Bang & Olufsen than Fisher-Price. Viz the latest buzz surrounding the much-rumored 20th Anniversary Mac.

According to the Beemer bunch, this obscenely expensive misnomer — the device will actually commemorate *Apple's* china anniversary, not the Mac's — will draw on the legendary Spartacus "designer Mac" specs. (As faithful readers of these pages will remember, that butch code name has been batting around Cupertino since warm-blooded mammals there first learned to wield a mouse.)

You want high concept? Dig this, Daddy-o! The limited-edition device, due in January, will resemble a silver-and-black LCD panel and notebook motherboard set upright and resting on two feet. While the CPU will resemble a top-heavy Color Classic from the front, it will measure less than 2 inches deep.

You want peripherals? You got 'em. Users will be able to pop their Windham Hill CDs right into the side of this classy little box while watching cable-TV input on the unit's big 10-inch active-matrix color display.

You want slots? Go cat-wild! While this Yuppie chow will be based on a PowerBook logic board, it's not the same design slated for the Epic line. Users will be able to stick in two PCI cards by removing a box mounted on the back.

Clutch-purse fever

Of course, Apple is not wholly abandoning the curvy-and-bulbous school of industrial design, judging from the clutch-purse devices trotted out by Messrs. Amelio and Casanova on the opening day of Macworld Expo in Boston.

However, the jury is still out on exactly *what* these sit-and-spin CPUs will be. While conventional wisdom pegs them as PowerBooks of the future, some school marms maintain that the polychrome devices are actually the keyboard-equipped ÜberNewtons the Knife has predicted for the K-12 market.

The postmodern Apple IIc machines, code-named Shay — a k a Project K — will hit education channels early next quarter, sources say. Apple also has marketing programs in the works that will give schools loaner units for students to take home.

Coincidence, or proof of ancient astronauts? Collateral rumblings among Newtonian devotees concern the first Apple PDAs based on Digital's *muy macho* new StrongARM chips. Sources report that a steroid-spiked prototype equipped with a 160-MHz StrongARM can run for more than 40 hours on four AA batteries.

The whizzy new device will feature text-to-speech capabilities (and maybe even speech recognition) when it ships in time for Christmas. □

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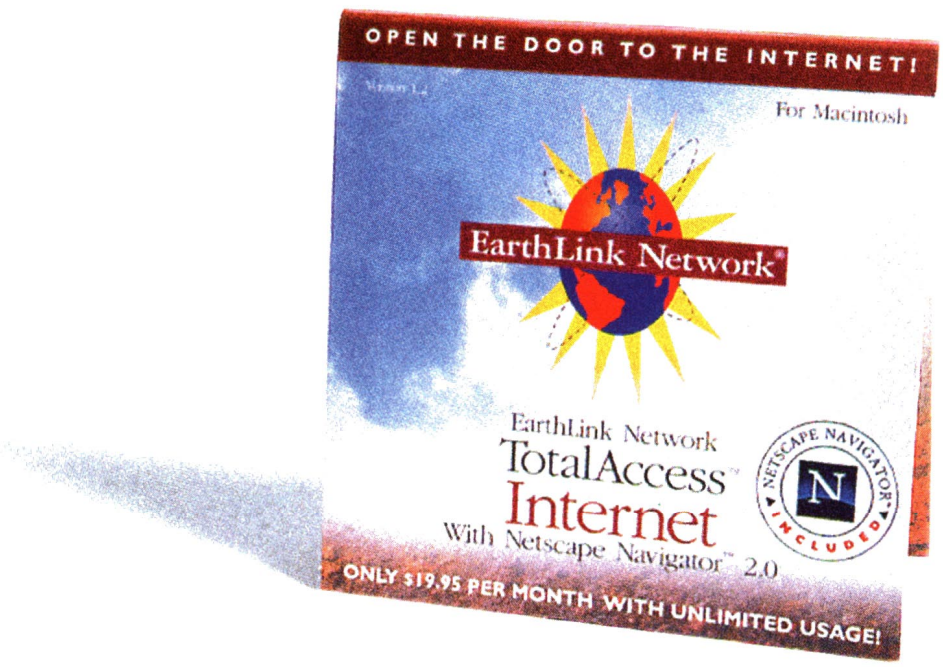

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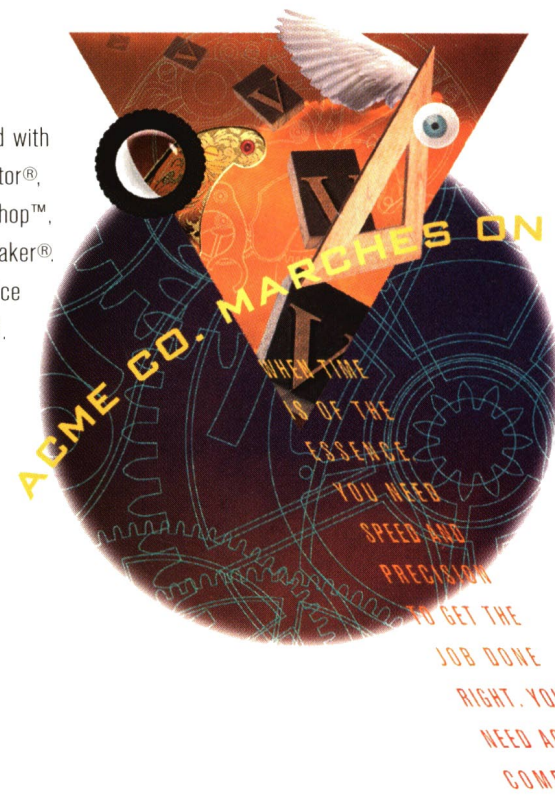

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